FastRIP™

Version 9.0 for Macintosh

PostScript Interpreter for Non-PostScript Inkjet Printers

User's Manual

FastRIP™ PRO
(Epson 4000, 4800)

FastRIP™ HD PRO High Speed
(Epson 4800)

FastRIP™ XL
(Epson 7800)

FastRIP™ LF
(Epson 9800)

A Product of

U.S. Screen Print & Inkjet TECHNOLOGY

For future reference write your dongle
serial number here:

March 2007 Ver1.2

FastRIP™ Version 9.0 for Macintosh

User's Manual

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Chapter 1
Quick Start

Note: Even if you don't plan to do a Quick Start installation, please read the following section for an overview of the installation process.

Don't let the size of this manual overwhelm you. FastRIP™ Pro is very easy to use and simple to install. In this section, we will cover the basics for getting started using this great software tool. A more detailed and comprehensive guide to installing and using this program follows. Should you need any assistance along the way, don't hesitate to call our Technical Support department.

Support Hours

Toll Free	+1 888-MYTJETS (698-5387)
Technical Support	+1 480-929-2937
Corp. Office	+1 480-929-0640
Fax	+1 480-929-0766
Email:	support@usscreen.com
Internet:	www.ScreenPrinters.Net Click on the Support tab.
Support hours:	7:00am to 8:00pm Monday through Friday 9:00am to 3:00pm Saturday and Sunday (Mountain Standard Time) USA

Note: Arizona does not observe "Daylight Savings Time."
In the summer months, Arizona is on the same time as California.

Basic Printer Setup

(For Epson 4000, 4800, 7800 and 9800)

1. Open the box and carefully unpack the Epson Printer.

2. Connect the Printer's power cord to the back of the printer. Then connect the opposite end to an AC electrical outlet (We recommend the use of a surge protector to prevent power spikes from damaging the internal components of your printer.) Do NOT connect the printer to your computer at this time.

3. Load the ink cartridges.

Listed below are model specific ink cartridge loading instructions:

Epson 4000- Insert an UltraChrome Photo Black (T-5433) or FastINK™ cartridge in slot number 5. If an Epson Matte cartridge is inserted into slot number 5, contact our Support Department for a replacement.

Epson 4800 when used with FastRIP™ HD PRO HS- Insert a FastINK™ cartridge in slots 5 *through* 8. Be advised you should only print on a waterproof film like FastPOS™ WP.

Epson 7800 and Epson 9800- Insert an Epson UltraChrome Photo Black (T-5433), Epson dye-based ink or FastINK™ cartridge in slot number 1.

Note: Epson UltraChrome Ink only works with waterproof film like FastPOS™ WP. Epson UltraChrome ink will NOT print film transparencies.

Be Advised: Each time you power on your printer, some ink is used to prime the print heads. Even if the majority of your printing jobs use only one color (mostly commonly black), you will eventually need to refill or replace the other color cartridges.

Installing FastRIP™ on a Macintosh OS9 or OSX

MAC OS 8.6 - 9.2.2

1. A computer to printer connection method must be selected. There are only three ways to connect the Epson - USB to USB (not all Epson printers support this connection), USB to Parallel Port or Ethernet. A serial port connection is too slow to properly transfer data from the RIP.

   Only Belkin or Epson USB cables will work with FastRIP™ , FastRIP™ XL or FastRIP™ LF. (Belkin USB part# F5U002 Epson USB Adapter Kit part# C-USB-PK4) However, if you use a Belkin cable, it will not be recognized by the regular Epson driver. You must use the Epson USB cable with the regular Epson driver on a MAC.

1. Install the regular driver for your inkjet from the Epson Macintosh driver CD. DO NOT install the optional Epson Stylus Pro RIP.

2. Plug the USB Dongle into any available USB port.

3. Insert the FastRIP™ CD and *double-click* on the FastRIP™ CD icon. *Double-click* on the Installer icon and follow the on-screen prompts from Easy Install™. (For more details turn to page 25.)

4. Go to *Macintosh HD>FastRIP* and *double-click* on the FastRIP™ icon. FastRIP™ will open and you can enter your product serial number. Click on the *Options* menu and *Output Selection*. Choose your new printer, port and device.

   Note: If the RIP does not recognize or find your Dongle, it will not open properly. If this occurs, remove the Dongle, reboot your computer and reinstall the program and drivers. If you are still unable to open FastRIP™, contact our Support Department.

5. You must now create a *Desktop Printer*. Locate the FastRIP folder on the Macintosh HD and *double-click* on the application called *PS Desktop Printer Utility*. Select FastRIP LW 8.7 - "Create Desktop" FastRIP (direct). Select a PPD file of Epson Color Stylus * (the asterisk is your particular printer model) and name the printer. Save it to your Desktop.

6. FastRIP™ is now ready for use.

7. Register your company in the FastRIP Users Arena at www.FastFILMS.com/FastRIP/users/.

MAC OSX 10.2 - 10.4 (Jaguar, Panther, Tiger)

2. A computer to printer connection method must be selected. There are only two ways to connect the Epson - USB to USB (not all Epson printers have this connection), USB to Parallel Port or Ethernet. A serial port connection is too slow to properly transfer data from the RIP.

   Only Belkin or Epson USB cables will work with FastRIP™ , FastRIP™ XL or FastRIP™ LF. (Belkin USB part# F5U002 Epson USB Adapter Kit part# C-USB-PK4) However, if you use a Belkin cable, it will not be recognized by the regular Epson driver. You must use the Epson USB cable with the regular Epson driver on a MAC.

   Note: When connecting the computer to the printer, first turn the printer ON, and then turn the computer ON. This will help the computer recognize the Epson printer.

3. Install the regular driver for your inkjet from the Epson Macintosh driver CD. DO NOT install the optional Epson Stylus Pro RIP.

4. Plug the USB Dongle into any available USB port.

5. Insert the FastRIP™ CD and *double-click* on the FastRIP™ CD icon. *Double-click* on the Installer icon and follow the on-screen prompts from Easy Install™. (For more details turn to page 25.)

6. Go to *Macintosh HD>Applications>Utilities*. *Double-click* on *Printer Setup Utility* (Panther 10.3 - Tiger 10.4) or *Print Center* (Jaguar 10.2). This brings up the printer List.

7. (For Jaguar 10.2 or Panther 10.3) Hold the *Option Key* and click on *Add*. Bring the top menu down and select *Advanced*. Expand the *Device* menu and select Stylus COLOR * or USB Parallel Adapter. RENAME the device to FastRIP Epson. Expand the *Printer Model* menu and select FastRIP . Select the model of your printer and click *Add*.

   (For Tiger) Click on *Add*. Click to highlight the Epson printer and RENAME it FastRIP Epson. Expand the *Print Using* menu and select FastRIP. Select your printer and click *Add*.

8. Go to *Macintosh HD>Applications>FastRIP* and *double-click* on the FastRIP icon. FastRIP™ will open and you can enter your product serial number.

   Note: If the RIP does not recognize or find your Dongle, it will not open properly. If this occurs, remove the Dongle, reboot your computer and reinstall the program and drivers. If you are still unable to open FastRIP™, contact our Support Department.

9. FastRIP™ is now ready for use.

10. Register your company in the FastRIP Users Arena at www.FastFILMS.com/FastRIP/users/.

Printing from a Graphics Application

You now have TWO printer drivers installed. One is the normal inkjet driver and the other is for FastRIP™ . The normal Epson driver in the *Chooser* will be called *SC 3000*, *SPro 7800-DYE*, *SPro 9800-Dye* etc. The normal Epson driver on MAC OS X driver will be called *Stylus Pro 4000*, *Stylus Pro 4800*, etc. In *MAC OS* , the FastRIP™ printer will be called *FastRIP LW 8.7*. With MAC OSX, it will be called what you named it when the driver was installed.

1. Load a sheet of clear FastPOS™ or FastPOS™ WP film in your inkjet printer with the ink receptive side up. (The ink receptive side is the side that is sticky if you lick your finger and touch the film.)

2. Open FastRIP™ and your favorite graphics application- *Photoshop*, *CorelDraw*, *Illustrator* or *Freehand*. In your application, select your image, create the color separations and set the halftone frequency, dot shape and angle.

   NOTE: For Adobe Illustrator 9.0 or higher and Freehand you must also load a PPD file. (For detailed instructions see page 39.)

3. (MAC OS 9) Select the FastRIP LW 8.7 printer from the *Chooser* and go to *File>Page* (or *Print*) *Setup*. Select *FastRIP Epson* and click *Ok*. Go to *File>Print* and expand the *General* menu. Select *Printer Extensions 1*. Expand the *Print Mode* menu and select *FastRIP - Standard Density*. Select *Print*.

   (MAC OSX) Select *File>Page* (or *Print*) *Setup* and choose your FastRIP™ printer under *Format For*. Set your *Page Size* and click *Ok*. Go to *File>Print* and select your FastRIP™ printer. Expand the *Copies and Pages* menu to select *Printer Features*. From the *Print Mode* menu, select *FastRIP - Standard Density*. Select *Print*.

Now....read this entire manual, watch the video and enjoy FastRIP™ !

Chapter 2
Introduction

Welcome to FastRIP™ Pro 9.0

Congratulations on purchasing FastRIP™ Pro, the affordable PostScript printing solution for non-PostScript printers. PostScript is an industry-standard scripting language that describes the text and graphic elements of a print job. When FastRIP™ processes a print job, these PostScript elements are used to generate a raster image (a series of horizontal lines) that the printer is capable of rendering. The printer will then print your image one raster line at a time.

FastRIP™ performs the task of a Raster Image Processor (RIP), not only handling PostScript interpretation, but also performing high-speed memory management of the raster image and the spooling of multiple jobs to the printer. FastRIP™ utilizes Virtual Memory (VM) disk processing to do this. VM processing means PostScript file size limitations have been nearly eliminated while also supporting up to PostScript Level 3 images.

PostScript and Raster Images

The term “raster display” originates from the method by which television images are created in a series of horizontal scan lines. Sixty times a second (60 Hz), these scan lines are rendered from top to bottom on a cathode-ray tube (CRT). This frequency is faster than the brain can process the information, thus allowing a sequence of still pictures to create the illusion of movement. Televisions and computer monitors are referred to as raster displays and the rectangular pattern of horizontal lines refers to a raster.

A printer is also considered a raster display, since printing requires text and graphics to be translated into a rectangular pattern of horizontal lines. The printer will then lay ink upon the media for each raster line, rendering the final image. The process of creating a raster from text and graphic elements is known as rasterization.

Printers - PostScript versus Non-PostScript

A PostScript file is a computer file that contains page layout descriptions for a print job. The term “PostScript Printer” originated in the late 1980's to describe printers designed to receive PostScript files from networked computer terminals. When computers were not nearly as powerful as today’s machines, a central printer would be customized with expensive memory and an upgraded

microprocessor. This printer could then combine a PostScript file with printer-resident fonts, as well as any graphics or additional fonts that were transmitted with the PostScript file. Finally this printer would perform the raster image processing (RIP) task and output the results.

Using a PostScript printer was considered efficient because it did not require each of the networked computers to handle the complicated rasterization process. Each computer was only required to transmit a relatively small PostScript file, which placed very little demand upon the network.

The term "Non-PostScript Printer" originated in the early 1990's. As PC's became faster and larger amounts of internal RAM became standard, printers no longer had to act as image processors. With less on-board memory and fewer tasks to process, these "dumb" printers were significantly less expensive and they could print much faster. The task of rasterizing the PostScript data was now the responsibility of each desktop or laptop within the network. The printer would merely receive the raster data and produce an output, making no modifications.

Using FastRIP™

The FastRIP™ application is a rasterization solution for non-PostScript printers. FastRIP™ will take the text and graphic elements of a print job, create the corresponding PostScript data, generate a raster for the entire job and then manage the spooling of raster data to the printer.

- **Why you need FastRIP™**

  Generally, inkjet printers do not come with a PostScript Interpreter. Even with those that do (the Epson Printers use Epson Stylus Pro RIP); their PostScript capabilities are typically designed for color calibration and not halftone output. Halftone dots are the key to printing vibrant or photorealistic images

  FastRIP™ was designed specifically to handle halftones, enabling an inkjet printer to create output very close to imagesetter quality using off-the-shelf Epson inkjet ink. The software is also calibrated to allow for the over 50% dot gain produced when printing inkjet ink to clear film. This means that if your graphic specifies a 50% dot, you won't get a 70% dot.

- **FastRIP™ Functions**

  FastRIP™ is very simple to use. Unlike some RIP's that require you to print to a "hot folder" and jump through several proverbial "hoops" in order to output a job, FastRIP™ allows you to print directly from within your application.

- **Film Output - Standard or Double Density**

  FastRIP™ has *two* functions for clear film output- either *Standard Density* or *Double Density*. For a high quality film such as FastPOS™, you can use the *Standard Density* setting. For films that have a rough coating and/or need a heavier deposit of ink to produce dense black images, you should use the *Double Density* setting.

Note: For more settings when printing film positives with the:

- Epson 4000 refer to page 49 of this manual.
- Epson 4800 refer to pages 55 or 60 of this manual.
- Epson 7800 and 9800 refer to page 65 of this manual.

- **Inkjet Proofs**

  A major feature of FastRIP™ is the ability to print a color calibrated inkjet proof to show the customer. You can print a standard inkjet proof or you can print a proof using standard halftone dots settings of either 45 LPI (Lines per Inch), 55 LPI. You can even print at 65 LPI to simulate the look of halftones when the image is actually screen printed.

- **Heat Transfers**

  FastRIP™ is calibrated for most off-the-shelf, coated T-Shirt Transfer paper. It does color correction and mirrors the image before output.

- **A New Era for Inkjet Printers**

  FastRIP™ and an inkjet printer now offer a low cost solution to film output. Traditionally printers have had to use large format laser printers for film output.

  Although this has been a standard practice for years, “mis-registration” has been an ongoing struggle with no solution. Laser printers use fusing rollers to heat up the media, thereby causing shrinkage and poor registration. The lack of good toner deposit and the matte finish of laser acetate and vellum have caused screen printers headaches for years. Often the only solution has been adjusting exposure to times that are too short for screen durability.

  For those who demanded better registration and denser images, the only option was to use a dry thermal system. At $7,000 to $15,000 per system, one got excellent registration but lower resolution than an inkjet. Film imagesetters were the final solution. They have excellent registration, high

resolution for sharper images, and very dense black areas, but they come with a very hefty price tag. Starting at $20,000 and going up from there, these systems are generally not a viable option for most garment decoration businesses.

The combination of FastRIP™ and an EPSON 4000, 4800, 7800, 9800 inkjet printer allows you to produce near-imagesetter quality images without requiring you to take out a second mortgage on your home. It is now possible to get excellent registration, dense black and sharp edges using standard off-the-shelf ink and clear film that is readily available in a variety of sizes.

- Use FastRIP™ PRO and the Epson 4000, 4800 to produce prints up to 17" wide!
- Use FastRIP™ HD PRO HS and the Epson 4800 to produce prints up to 17" wide!
- Use FastRIP™ XL and the Epson 7800 to produce prints up to 24" wide!
- Use FastRIP™ LF and the Epson 9800 to produce prints up to 44" wide!

- **The Trade Off**

There are trade offs to using an inkjet that are greatly minimized when you compare the cost savings. An inkjet printer is not as fast as a laser, dry film system or imagesetter. A color separation that might normally take five minutes for each film to print, may take up to eight or nine minutes for the inkjet. While this does not seem like a big issue, when outputting dozens of films per day, this may be a bottleneck for some shops. Computer processor speed and Ram have a huge impact on the computer "ripping" time.

If speed is an issue, invest in another EPSON, a second copy of FastRIP™ and a computer workstation. The cost savings over a traditional imagesetter will still be substantial.

Be aware that inkjet film needs to dry for a few minutes, so you may need to find a system for hanging film (we used to do this when we had cameras). Also, an inkjet may require a little more maintenance than traditional systems. Regular head cleanings should be performed.

Printing from the Epson 4000, 4800, 7800 and 9800, you will have excellent registration with roll or sheet media.

- **Supported Printers**

  As of the writing of this manual, FastRIP™ Pro supports the Epson 4000, 4800, FastRIP™ HD PRO High Speed supports Epson 4800, FastRIP™ XL supports the EPSON 7800 and FastRIP™ LF supports the EPSON 9800. To find out if a different printer model is supported go to http://screenprinters.net/product_family.php.

- **Security Device**

  FastRIP™ is provided with a software protection device, called a "Dongle," to prevent unauthorized use or pirating of the software. The Dongle is visible to FastRIP™, yet remains transparent to other applications.

- **FastRIP™ Manual**

  The electronic version of this manual is on the FastRIP™ CD in a folder called FastRIP™ Manual. It is an Adobe Acrobat PDF file. If you don't have Adobe Acrobat, there is a free version on the FastRIP™ CD.

- **FastRIP™ Support**

Toll Free	+1 888-MYTJETS (698-5387)
Technical Support	+1 480-929-2937
Corp. Office	+1 480-929-0640
Fax	+1 480-929-0766
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  Note: Arizona does not observe “Daylight Savings Time.”
  In the summer months, Arizona is on the same time as California.

  Before calling for support, please make sure you have watched the video and read the entire manual. If you are not able to find the answer to your support questions in the manual or the video, you can also visit FastRIP™ User’s Arena on the internet at www.FastFILMS.com/fastrip/users. Here you will find news, Frequently Asked Questions, Public Documents, Technical Articles, a Support Request Form and downloads for the FastRIP™ program.

  Support is provided only for the software application FastRIP™ and not for your Epson inkjet printer. Although we will try to assist you with printer

problems, your best option is to contact the dealer from whom you purchased your Epson printer or call the manufacturer's Technical Assistance.

- **MAC System Requirements**
  For optimum performance, the fastest available computer should be used as the host. The following system configuration should be considered a minimum:

  - A Power Macintosh with a processor Speed of 400Mhz or higher
  - OS 8.6 - OS 9.2.2 for FastRIP™ Classic/ OS 10.2.8 or higher for FastRIP™ OSX/
  - 256MB of RAM (512MB or more is highly recommended)
  - A Free USB port for the Dongle. (You will also need one for the printer if you are not connected through an Ethernet connection.)
  - A computer to printer connection method- USB to USB (not all Epson printers have this connection), USB to Parallel Port or Ethernet. A serial port connection is too slow to properly transfer data from the RIP.

    Only Belkin or Epson USB cables will work with FastRIP™ .
    - Belkin USB part# F5U002
    - Epson USB Adapter Kit part# C-USB-PK4

    Note: Use the Epson USB cable with the Regular Epson driver on the MAC.
  - If you choose to use the Ethernet connection you must have an Ethernet interface card. Contact the Epson Store and reference part number C823632A for the 10/100 or part number C823622A for the 10 Base card.

Note: If printing with the Epson 4800, or 7800 you will need to use MAC OS X 10.2.8 or higher.

- For additional FastRIP™ Pro Requirements, refer to pages 49 of this manual.
- For additional FastRIP™ HD PRO High Speed requirements, refer to page 55 of this manual.
- For additional FastRIP™ XL Requirements, refer to page 65 of this manual.
- For additional FastRIP™ LF Requirements, refer to page 65 of this manual.

- **Do Not Lose The Dongle!**

  The Dongle acts like the key to a lock. As such, it is an integral part of the FastRIP™ program and must be treated applicably. If you lose the Dongle, you will be required to *purchase* a replacement. Protect the Dongle! Without

it, FastRIP™ will not function. The easiest way to protect yourself from loss or theft is to make sure the software AND the “hardware” Dongle are covered by your insurance. To purchase a replacement Dongle, contact US Screen for pricing and details

- **If the Dongle Does Not Work**

  If failure of the hardware (Dongle) has resulted from accident, abuse or misapplication, US Screen shall have no responsibility to replace the hardware. Replacement will be warranted for the remainder of the original warranty period or 1 year, whichever is longer. If the Dongle ceases to operate within the 1 year warranty period, it will be replaced at no charge AFTER it has been returned to the US Screen & Inkjet Technology. You *must* insure the Dongle for at least $250 against loss or damage during mailing. If the Dongle is not under warranty, a replacement Dongle can be purchased. Contact U.S. Screen for pricing or for details on purchasing or returning a defective Dongle. All returns must be shipped with a tracking number and have a return authorization number on the box provided by US Screen Print & Inkjet Technology.

Chapter 3
Installing FastRIP™ on a MAC OSX

Install the Regular Inkjet Driver First

Although FastRIP™ has its own printer drivers, you must install the printer driver that came with your printer in order to utilize utility programs like Head Cleaning and Nozzle Checks. These are only available for use with the standard inkjet printer driver.

DO NOT install the EPSON Stylus RIP Postscript driver. This driver can confuse the FastRIP™ installation. If you have already installed this driver, delete the Postscript Epson printer driver and re-install only the standard driver.

Ensure you have the most current inkjet driver. You should go to www.epson.com and download the most current USB driver for the EPSON 4800, EPSON 7800 or EPSON 9800.

After FastRIP™, is installed you will have TWO EPSON drivers - the normal driver and one that FastRIP™ uses.

FastRIP™ OSX and Graphic Programs

Native OSX Programs
FastRIP™ OSX will only print direct from a native OSX program through FastRIP™ . Native MAC OSX programs are *Adobe Photoshop 7* and higher, *Adobe Illustrator 10* and higher, *Adobe InDesign 2* and higher, *Macromedia Freehand 10* and higher or *QuarkXPress 6* and higher.

Classic Environment MAC OSX Programs
You will not be able to print from the MAC OSX *Classic Environment*. Classic Environment MAC OSX programs are *Adobe Photoshop 6* and below, *Adobe Illustrator 9* and below, *Macromedia Freehand 9* and below or *QuarkXPress 5* and below. To use FastRIP™, you must upgrade your graphics program.

FastRIP CD

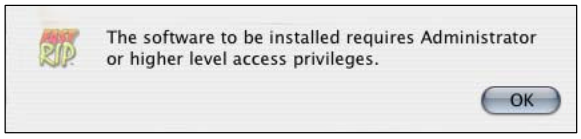
The FastRIP CD contains a 20 day trial version of FastFILMS, a complete catalog of all volumes of FastART, a catalog of all the effects available with FastFX, Adobe Acrobat Reader, Sample files, and of course, FastRIP™.

Installing FastRIP™

During the installation process, both FastRIP™ and all the needed printer support files will be added to your computer.

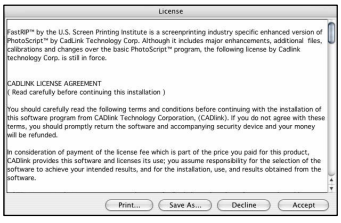
- To begin the install, insert the FastRIP CD and *double-click* on the CD icon. *Double-click* on the file called "FastRIP Installer."

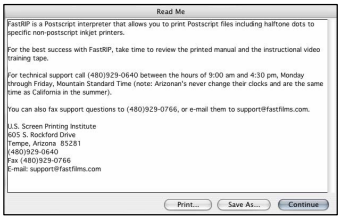
- The *Authenticate* dialog will display. Type your *User Name* and *Password*. If you are not using this feature, just leave it blank and click *Ok*.



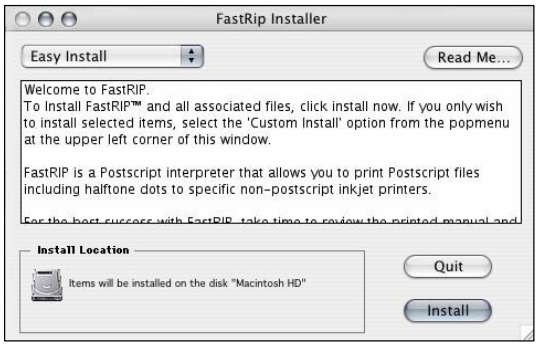
- If you don't know the User Name and Password, contact your IT administrator for details. If you set up the original user account but do not remember the password, you can reset it by clicking on the question mark. The *Help Viewer* will direct you on how to change your *Password* or you contact Apple Support for assistance.

- Click on *Continue* at the initial splash screen, *Accept* the subsequent license agreement and look over the *Read Me* before continuing the installation.





- Easy Install™ will display a pop-up, allowing you to select an installation option. Use the *Easy Install* option unless you are an advanced user. Click on *Install*.


FastRip Installer
Easy Install
Read Me...
Welcome to FastRIP.
To Install FastRIP™ and all associated files, click install now. If you only wish to install selected items, select the 'Custom Install' option from the popmenu at the upper left corner of this window.
FastRIP is a Postscript interpreter that allows you to print Postscript files including halftone dots to specific non-postscript inkjet printers.
Install Location
Items will be installed on the disk "Macintosh HD"
Quit
Install

- At the end of the installation you will be asked to exit the installer. Click on *Quit*.

Installation was successful. If you are finished, click Quit to leave the Installer. If you wish to perform additional installations, click Continue.
Continue
Quit

Un-Installing FastRIP™

If for some reason you need to un-install FastRIP™, simply drag the FastRIP folder from the *Macintosh HD* to the *Trash*. Make sure to empty the *Trash* before commencing a new installation.

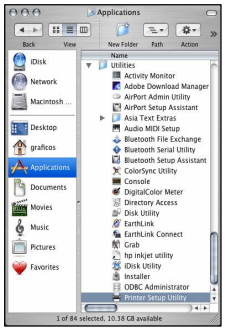
You can also un-install the software through the FastRIP CD
Insert the CD and click on the *FastRIP Installer*.

- At the *FastRIP Installer* window, select *Uninstall*. Click *Uninstall*.
- Any custom templates and/or files you have created must be removed manually. Go to *Macintosh HD>Applications* and delete the *FastRIP* folder.
- Empty your *Trash*.
- Restart your computer.

FastRip Installer
Uninstall
Read Me...
Use this option to delete FastRip and associated files from your system. If you have created your own custom profiles, these will be left intact on your system. If you wish to delete then put tem in the Trash manually.
Install Location
Items will be uninstalled from the disk "Macintosh HD"
Quit
Uninstall

Adding FastRIP™ Printer to the Printer List

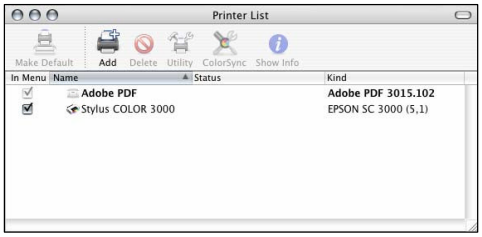
Make sure you printer is connected to your computer. Turn the Epson printer ON, then turn ON your MAC.



(For MAC OS X 10.4 Tiger printer setup refer to Appendix B.)

Go to *Macintosh HD>Applications>Utilities*. *Double-click* on *Printer Setup Utility* (Panther MAC OS X 10.3 or Tiger MAC OS X 10.4) or *Print Center* (Jaguar MAC OS X 10.2).

Hold down the *Option* key and click *Add*.

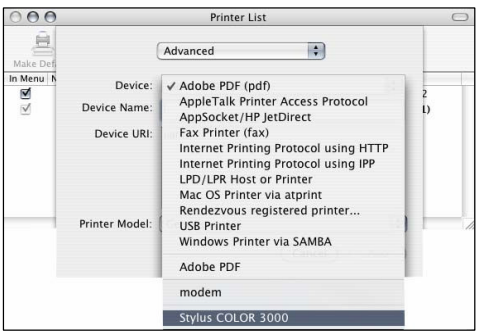


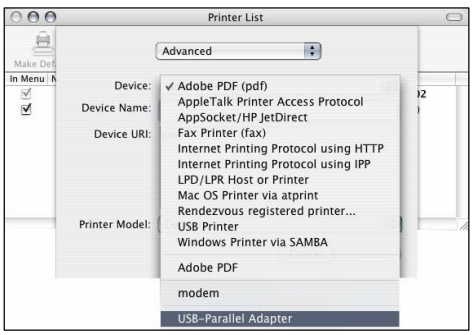
Expand the menu and select *Advanced*.

USB Cable

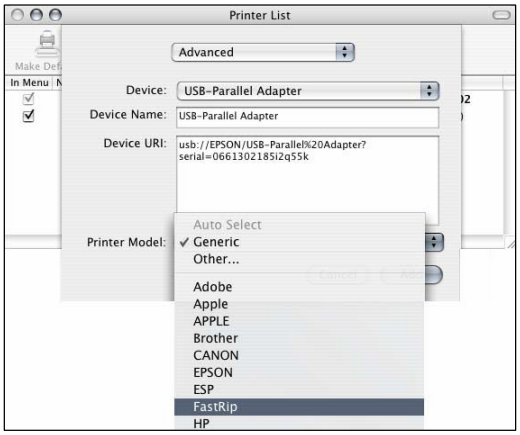
Expand the *Device* and look for something like Stylus COLOR 4000, USB Adapter, etc. Select this device.

Hint: If you do not see the printer or cable listed. Connect the printer cable from the computer to the printer. Turn or leave the Epson printer ON. Restart the computer. This helps the computer find the Epson printer.

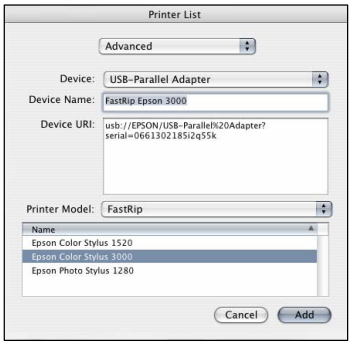


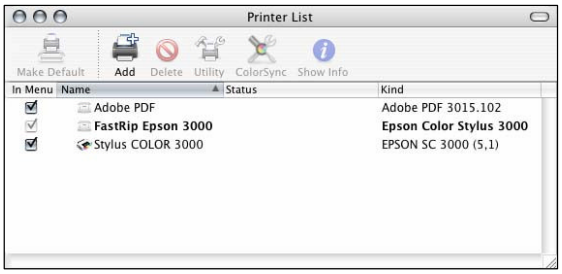


Expand the *Printer Model* menu and select *FastRIP* . Now select the model of your printer, for example Epson Color Stylus 4000, Epson Stylus Pro 7800 - Full, Epson Stylus Pro 9800 - Sheet, etc.



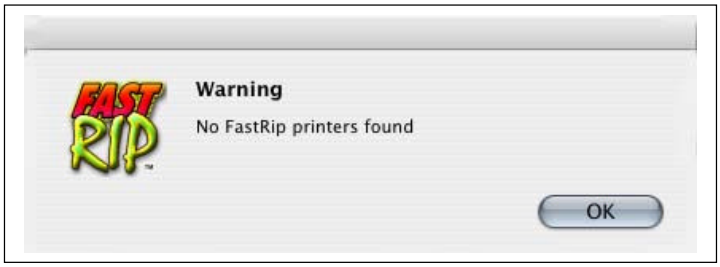
Change or *Rename* the *Device Name* to FastRIP Epson or any other identifying name. Click *Add*.





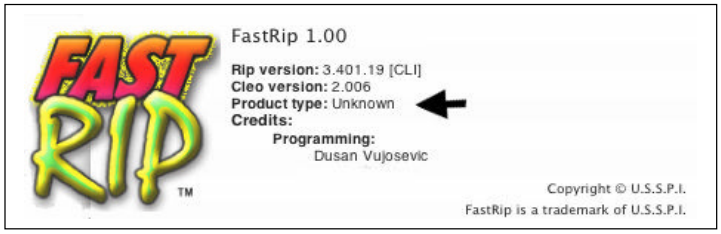
No FastRIP Printers Found

If you receive the message “No FastRIP printers found,” you need to return to the *Print Center* or *Printer Setup Utility* to install a printer.



Status of Dongle

Check the status of your Dongle by going to *FastRIP>About FastRIP*. If the *Product type* says *Unknown*, then the USB Dongle is not being recognized. Try plugging the USB Dongle into a different USB port and close FastRIP™. Reopen FastRIP™ and check *Product type* again.



If the USB Dongle is recognized, *Product type* will state FastRIP v*****.

Hint: If you do not have a free USB port, the Dongle may be plugged into a USB Hub.

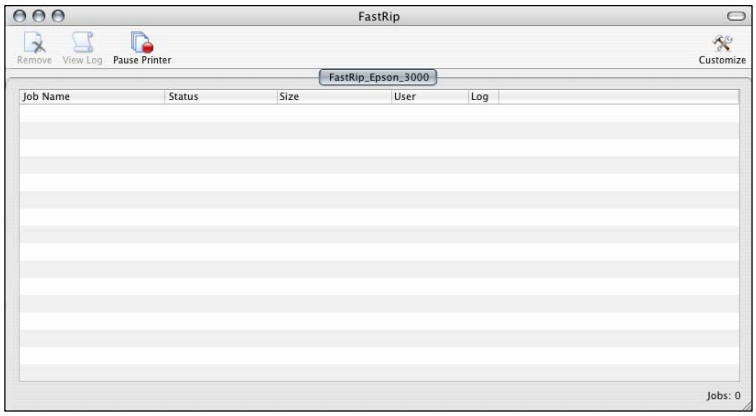
Configuring FastRIP™

Prior to use, the FastRIP™ application must be configured for the model of printer that will be receiving the raster data, as well as how FastRIP™ will send the data to the printer. The following procedure summarizes how to set up your program to output raster data to a connected printer.

1. Locate and open the FastRIP folder that was created during the installation. The default destination is *Macintosh HD>Applications*.

2. *Double-click* the FastRIP icon to launch the application.

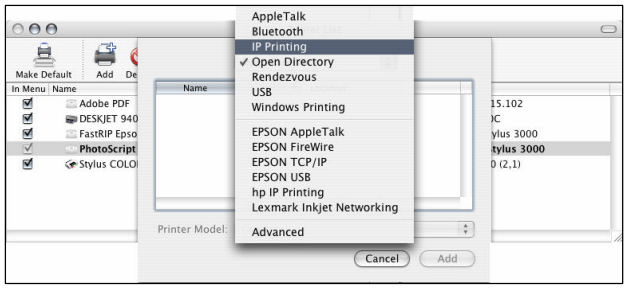
The following screen should appear. This is the FastRIP™ *Main Queue.*



Ethernet connection

To configure FastRIP™ to utilize an Ethernet connection for printing, follow these steps:

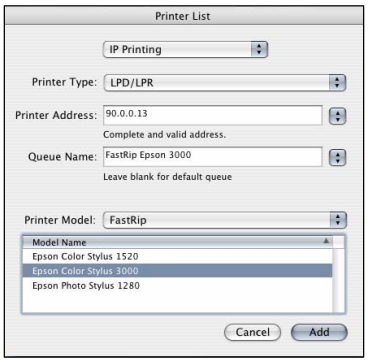
1. Expand the main menu and select *IP Printing*.



2. Set *Printer Type* to *LPD/LPR.*

3. Set *Printer Address* to the IP address of the Epson printer. For assistance with the IP Address of the Epson printer, you may download the EpsonNet MAC Assist file from Epson's website. Go to http://support.epson.com/hardware/printer/option/c82362/index.html. Download *MacAssist v4.1aE.*

4. Set *Queue Name* to FastRIP Epson or something else that you will remember.



   Note: When dealing with IP Addresses, you CANNOT use spaces between words. Use the underscore (i.e. word_word) to substitute for spaces.

5. Expand the *Printer Model* menu and select FastRIP. Choose the correct Epson printer under *Printer Name* and click Add.

Optimizing Memory Usage

FastRIP™ is a software Raster Image Processor (RIP), which means the performance of the RIP will depend entirely upon available computer resources. The microprocessor speed, available hard disk space and amount of computer memory all affect the efficiency of the RIP.

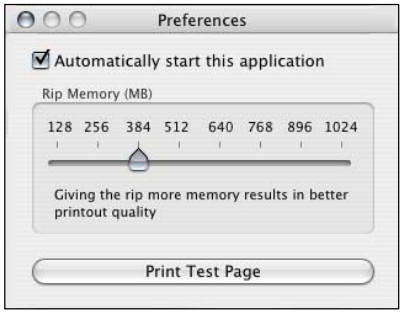
For serious color work, FastRIP™ should be provided with at least 128Mb of computer memory. This means there needs to be a minimum of 256MB on the computer to cover other system requirements such as OS and background programs.

Keep in mind, the more memory the better! You can check the amount of memory allocated to FastRIP™ by selecting *About This MAC* from the *Apple Menu*.

Allocating Memory to FastRIP™

By using the following procedure, you can allocate computer memory for use by FastRIP™:

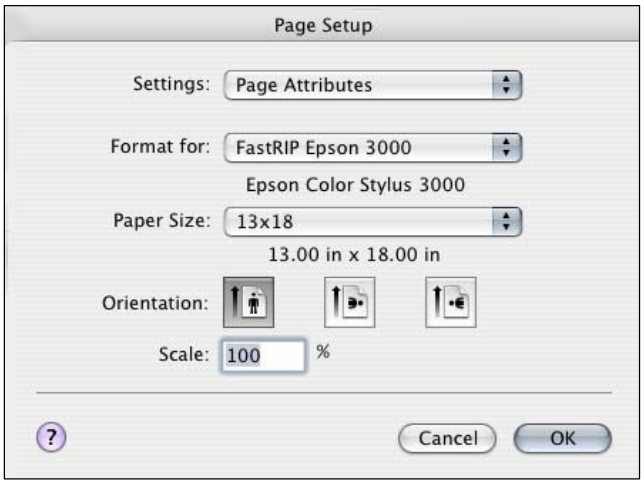
- Open FastRIP™ .
- Select the *FastRIP>Preferences*.
- Move the slider to the desired amount of memory.


Preferences
Automatically start this application
Rip Memory (MB)
128 256 384 512 640 768 896 1024
Giving the rip more memory results in better printout quality
Print Test Page

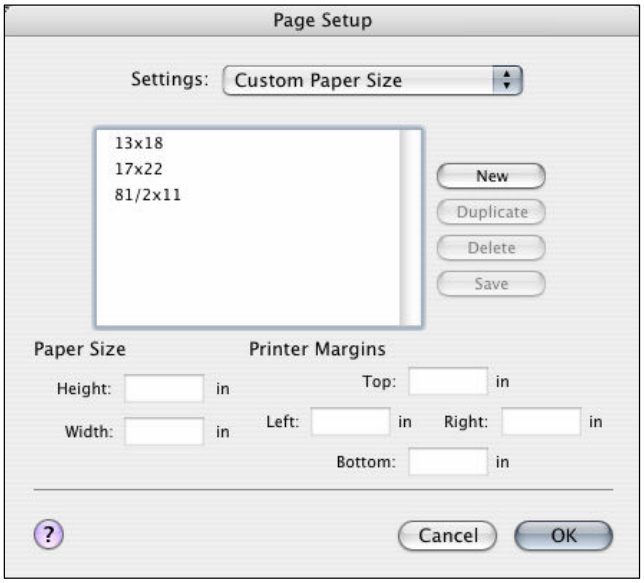
The memory allocated to your RIP cannot exceed 50% of the physical memory onboard your computer. For example if your computer has 256MB RAM of memory, the maximum memory you can allocate is 128MB.

Editing Custom Page Sizes

Open an image in your favorite graphics program and navigate to *File>Page Setup* or *File>Print>Page Setup*. Select the FastRIP printer under *Format for*. Expand the *Settings* menu and select *Custom Paper Size*.



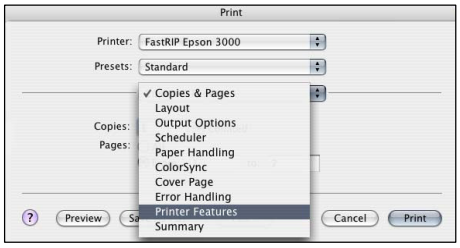
Click on *New* and give the page a name. Enter in the *Height* and *Width* and set the *Printer Margins*. Click *Save*. Click *Ok*. This new paper size will now be available to select.

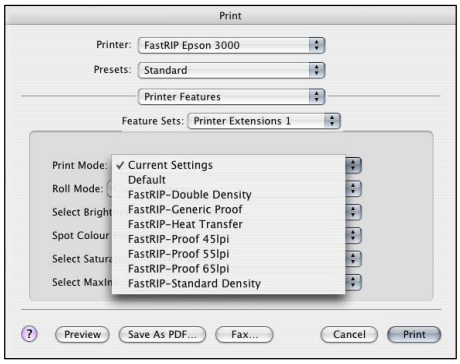


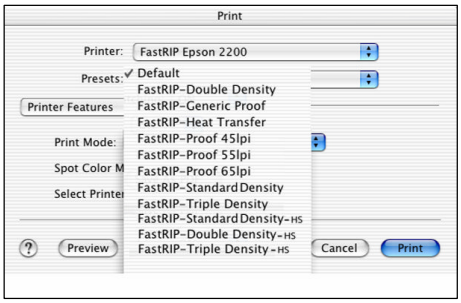
FastRIP™ Functions

To select the various print modes and other functions available with FastRIP™, go to *File>Print*. Select the FastRIP™ printer and expand the *Copies & Pages* menu to select *Printer Features*.

Select the print mode or function you need from the available list.







Note: A detailed listing of print modes and functions available for your printer begins on page 49 of this manual.

Chapter 4

Installing FastRIP™ on a MAC OS

Install the Regular Inkjet Driver First

Although FastRIP™ has its own printer drivers, you must install the printer driver that came with your printer in order to utilize utility programs like Head Cleaning and Nozzle Checks. These are only available for use with the standard inkjet printer driver.

DO NOT install the EPSON Stylus RIP Postscript driver. This driver can confuse the FastRIP™ installation. If you have already installed this driver, delete the Postscript Epson printer driver and re-install only the standard driver.

Ensure you have the most current inkjet driver. You should go to www.epson.com and download the most current USB driver for the EPSON 4800, EPSON 7800 or EPSON 9800.

After FastRIP™, is installed you will have TWO EPSON drivers - the normal driver and one that FastRIP™ uses.

FastRIP™ OSX and Graphic Programs

Classic Environment MAC OSX Programs

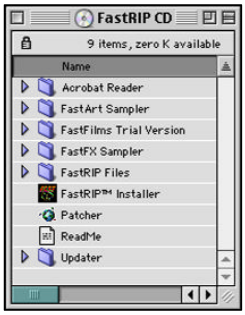
You will not be able to print from the MAC OSX *Classic Environment*. Classic Environment MAC OSX programs are *Adobe Photoshop 6* and below, *Adobe Illustrator 9* and below, *Macromedia Freehand 9* and below or *QuarkXPress 5* and below. To use FastRIP™, you must upgrade your graphics program.

The FastRIP™ CD

In addition to FastRIP™, the FastRIP™ CD contains a 20 day trial version of FastFILMS, a complete catalog of FastART, a catalog of effects available with FastFX, sample files and Adobe Acrobat Reader.

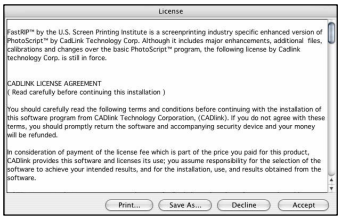
Installing FastRIP™

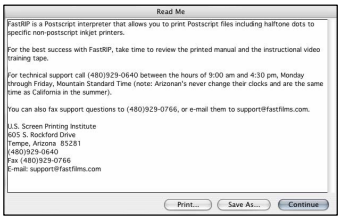
During the installation process, both FastRIP™ and all the needed printer support files will be added to your computer.



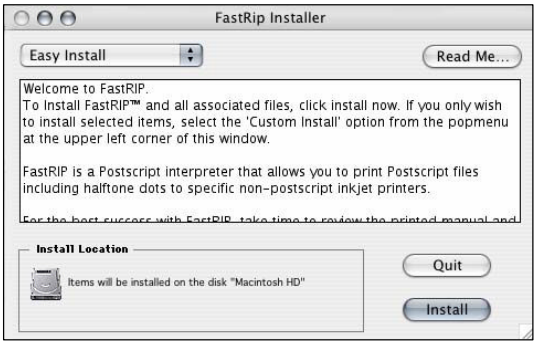
- To begin the install, insert the FastRIP™ CD and *double-click* on the CD icon. *Double-click* on the file called "FastRIP Installer."

- Click on *Continue* at the initial splash screen, *Accept* the subsequent license agreement and look over the *Read Me* before continuing the installation.





- Easy Install™ will display a pop-up, allowing you to select an installation option. Use the *Easy Install* option unless you are an advanced user. Click on *Install*.


FastRip Installer
Easy Install
Read Me...
Welcome to FastRIP.
To Install FastRIP™ and all associated files, click install now. If you only wish to install selected items, select the 'Custom Install' option from the popmenu at the upper left corner of this window.
FastRIP is a Postscript interpreter that allows you to print Postscript files including halftone dots to specific non-postscript inkjet printers.
Install Location
Items will be installed on the disk "Macintosh HD"
Quit
Install

- At the end of the installation you will be asked to exit the installer. Click on *Quit*.

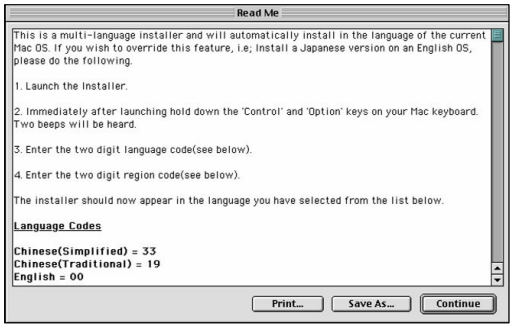
Installation was successful. If you are finished, click Quit to leave the Installer. If you wish to perform additional installations, click Continue.
Continue
Quit

Note: Advanced Users who desire to save system resources may avoid installing support files that will not be required by selecting the *Custom Install* option. Check only

the printers that will be used. If a new printer is later purchased, support files for that printer may be installed by executing the FastRIP™ installer again.

Foreign Language Installation

If you click on the *Read Me* button, you will be instructed on how to initiate a foreign language installation.

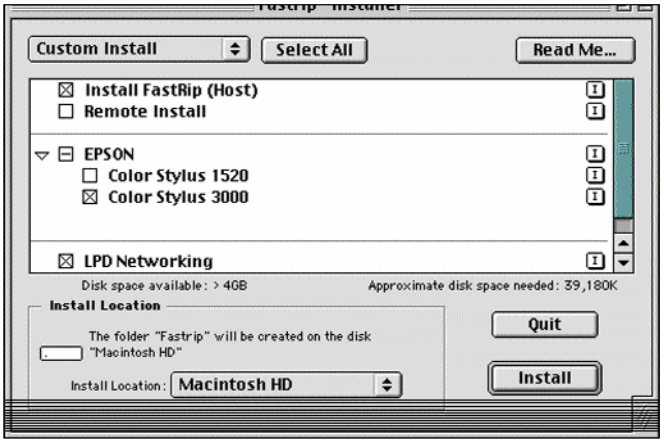

Read Me
This is a multi-language installer and will automatically install in the language of the current Mac OS. If you wish to override this feature, i.e; Install a Japanese version on an English OS, please do the following.
1. Launch the Installer.
2. Immediately after launching hold down the 'Control' and 'Option' keys on your Mac keyboard. Two beeps will be heard.
3. Enter the two digit language code(see below).
4. Enter the two digit region code(see below).
The installer should now appear in the language you have selected from the list below.
Language Codes
Chinese(Simplified) = 33
Chinese(Traditional) = 19
English = 00
Print...
Save As...
Continue

Note: The FastRIP™ program environment is only in English. The main informational text of the installer will be in the selected language.

Custom Install

Choosing the *Custom Install* option will provide you another menu with checkboxes for customizing the FastRIP™ installation.

Note: *Beside each checkbox, a small icon may be clicked to display additional information about that option.*



Custom Install Options

Install Location

Choose the folder location where you would like FastRIP™ files to be installed. For the best performance and, for ease in troubleshooting by Support, we highly recommend you let the program put FastRIP™ in a folder on your hard drive called *FastRIP*. This is the default location.

Install FastRIP (Host)

The *Install FastRIP (Host)* option is used to install the full FastRIP™ application and supporting files on the computer that will be running the RIP. Support files will be installed for all printers that have been specified with a check in their checkbox.

LPD Networking

The *LPD Networking* option is required when "Remote computers" will be sending jobs to the Host computer over a TCP/IP network.

Note: This option should not be installed unless a TCP/IP has been configured correctly and is up and running.

Printer Support Files

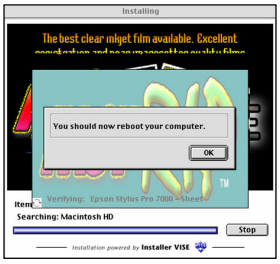
After the *LPD Networking* checkbox, there are checkboxes for major printer manufacturers. By selecting a checkboxes, all the support files for printers from that manufacturer will be installed.

Remote Install

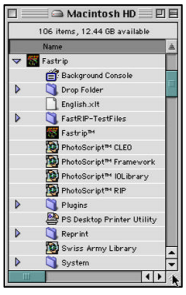
The *Remote Install* option is for "Remote computers" that will be sending jobs to a Host computer via either *AppleTalk* or *LPD networking*. The *LaserWriter* driver will be installed in the *Chooser*, and PPD files will be installed for the printer, but the full FastRIP™ application will not be installed. Refer to page 34 for more details.

Running the Installer

After you have clicked on *Continue* in the *Installer* window, FastRIP™ will install all of the necessary components on your hard drive. At the end of the installation you will be asked to re-boot your computer. Click *Ok*.



Once installation of FastRIPTM has been completed, the FastRIP folder will be available from the previously chosen *Install Location*. It may also open from your Desktop.



Un-Installing FastRIP™

If for some reason you need to un-install FastRIP™, simply drag the FastRIP folder from the *Macintosh HD* to the *Trash*. Make sure to empty the *Trash* before commencing a new installation.

You can also un-install the software through the FastRIP™ CD
Insert the CD and click on the *FastRIPTM Installer*.

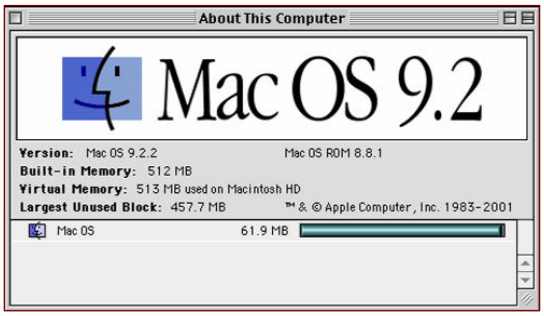
- At the *FastRIP™ Installer* window, select *Uninstall*. Click *Uninstall*.
- Any custom templates and/or files you have created must be removed manually. Go to *Macintosh HD>Applications* and delete the *FastRIP™* folder.
- Empty your *Trash*.
- Restart your computer.

FastRip Installer
Uninstall
Read Me...
Use this option to delete FastRip and associated files from your system. If you have created your own custom profiles, these will be left intact on your system. If you wish to delete then put tem in the Trash manually.
Install Location
Items will be uninstalled from the disk "Macintosh HD"
Quit
Uninstall

Optimizing Memory Usage

FastRIP™ is a software Raster Image Processor (RIP), which means the performance of the RIP will depend entirely upon available computer resources. The microprocessor speed, available hard disk space and amount of computer memory all affect the efficiency of the RIP.

For serious color work, FastRIP™ should be provided with at least 128Mb of computer memory. This means there needs to be a minimum of 256MB on the computer to cover other system requirements such as OS and background programs.


About This Computer
Mac OS 9.2
Version: Mac OS 9.2.2
Mac OS ROM 8.8.1
Built-in Memory: 512 MB
Virtual Memory: 513 MB used on Macintosh HD
Largest Unused Block: 457.7 MB
™ & © Apple Computer, Inc. 1983-2001
Mac OS
61.9 MB

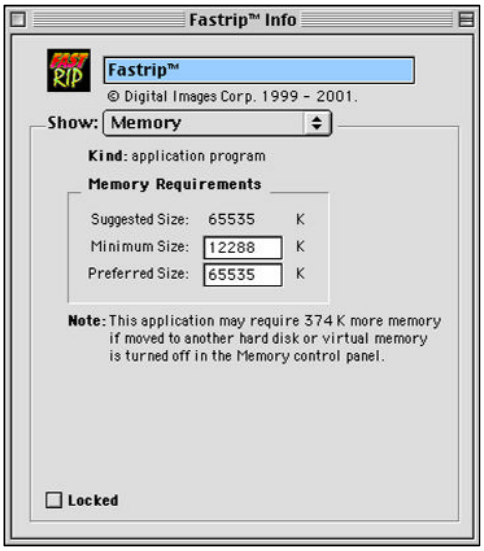
Keep in mind, the more memory the better! You can check the amount of memory allocated to FastRIP™ by selecting *About This MAC* from the *Apple Menu*.

Allocating Memory to FastRIP™

By using the following procedure, you can allocate computer memory for use by FastRIP™:

- Locate and open the FastRIP folder on your hard drive that was created during the installation of FastRIPTM .
- Open the *FastRIP* icon and select *File>Get Info>Memory* from the *Menu* bar

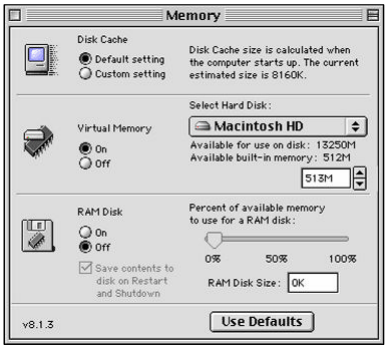
- A dialogue will display the *Get Info Memory* window. This window displays the minimum and preferred amounts of RAM to be allocated for FastRIP™.
- Set the *Preferred Size* text box to the desired amount of computer memory and *Close* the window.


Fastrip™ Info
Fastrip™
© Digital Images Corp. 1999 - 2001.
Show: Memory
Kind: application program
Memory Requirements
Suggested Size: 65535 K
Minimum Size: 12288 K
Preferred Size: 65535 K
Note: This application may require 374 K more memory if moved to another hard disk or virtual memory is turned off in the Memory control panel.
Locked

The memory allocated to your RIP cannot exceed 50% of the physical memory onboard your computer. For example if your computer has 256MB RAM of memory, the maximum memory you can allocate to FastRIP™ is 128MB.

Virtual Memory Manager

Should the RIP require more RAM than you have allocated, it will turn to Virtual Memory (VM) to meet its needs. VM refers to a process where space on your hard drive is allocated for use by applications to process data. Processing images and graphics uses a lot of memory so you should make sure no other applications are running when you are preparing your images for print. Although this is helpful, exchanging data between the hard drive and your CPU is a *much* slower process than just using RAM.



With FastRIP™ the *VM Manager* should be left in its default state (most likely OFF). Should you have "lack of memory" errors, you can set the VM Manager to ON. This *will* slow down your computer. Ultimately there is no substitute for real Memory and our recommendation is to increase the amount of RAM in your computer.

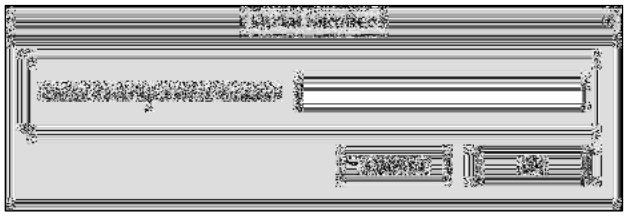
Configuring FastRIP™ for a Single Computer

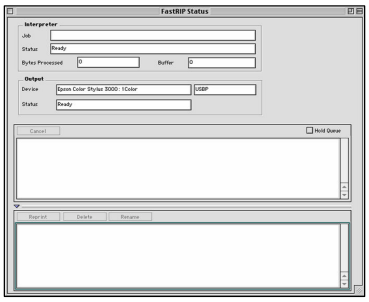
Prior to use, the FastRIP™ application must be configured for the model of printer that will be receiving the raster data, as well as how FastRIP™ will send the data to the printer. The following procedure summarizes how to set up your program to output raster data to a connected printer

1. Locate and open the FastRIP folder that was created during the installation. The default destination is *Macintosh HD>Applications*.

2. *Double-click* the FastRIP icon to launch the application.

3. If this is the first time you have run FastRIP™, you will be asked to enter your serial (Dongle) number. This number is on the actual Dongle. Enter it without spaces in the window provided.





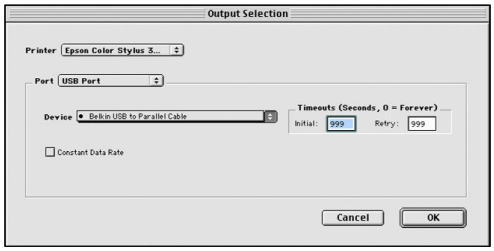
4. When the application is active, choose the *Output Selection* item from the *Options* menu.

5. From the *Printer* dropdown menu, choose the name of the connected printer.

6. From the *Port* dropdown menu, choose the means by which the printer is connected to the computer.

   95% of FastRIP™ users will connect to their printer via a USB port .

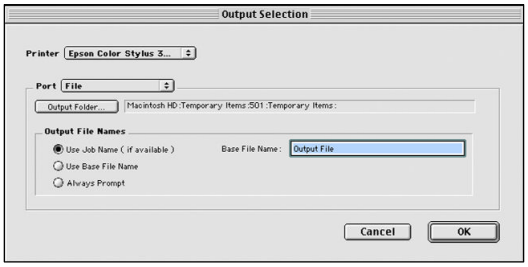
   Universal Serial Bus connections are very standard. If you are using an EPSON 3000 printer, you may need to purchase a Centronics USB cable from your computer supply store or directly from EPSON. The Belkin USB cable is part # F5U002 and the Epson USB Adapter Kit part is part # C-USB-PK4



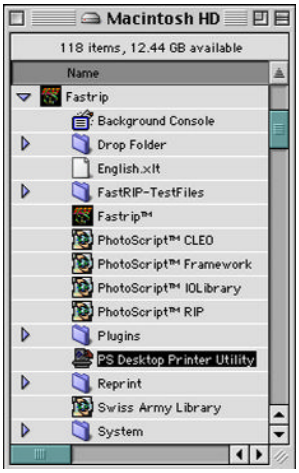
   Belkin cable will not be recognized with the Regular Epson driver. You must use an Epson USB cable with the Regular Epson driver on a MAC.

   File

   If you choose this port option, when you send a file to FastRIP™ it will perform a rasterization of the file but not produce an output. This is handy if you want to print the file at a later time.



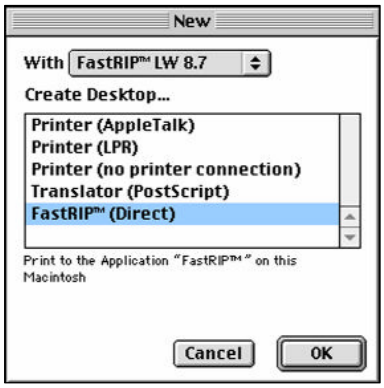
Creating a Desktop Printer



A desktop printer is a selectable icon that is used to identify the type and location of an available printer. Depending on the circumstances, either the *PS Desktop Printer Utility* (that is in the FastRIP folder on your hard disk) or the *Chooser* will be used to create a desktop printer. It is highly recommended you create a *Desktop Printer* for FastRIP™.

Sending a Print Job

Sending a print job refers to how a print job will be transmitted from a graphics application to FastRIP™. For example, if a single computer is being used, the print job would be sent directly to FastRIP™. If a computer network is being used, then the print job would be sent using the protocol for that network, such as either AppleTalk or LPR. The Create Desktop list box is used to select the method by which the print job is sent to FastRIP™ .

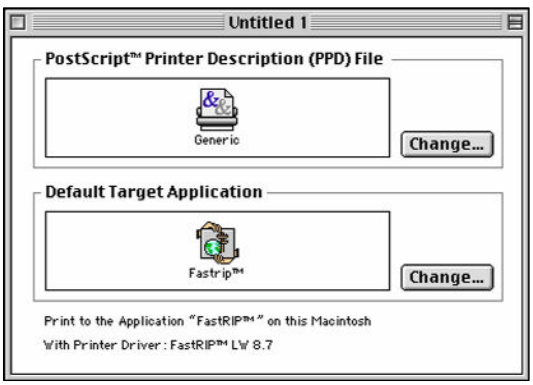


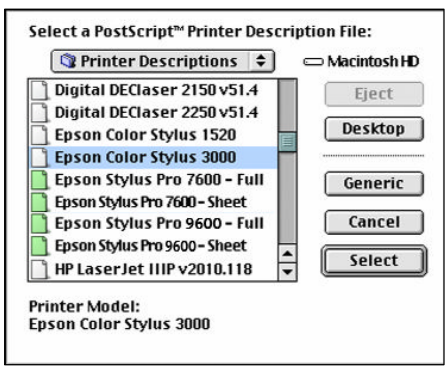
The recommended settings when printing from a single computer directly to the printer are:

With: FastRIP LW 8.*
Create Desktop.... FastRIP (Direct)

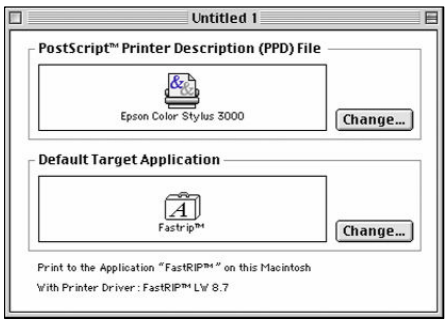
Selecting a PPD File

A second dialog box will open, allowing further settings to be adjusted, such as selecting the PPD (Postscript Printer Descriptions) file. A proper PPD file is CRITICAL to having FastRIP™ output properly. This file tells the RIP exactly how to print, what calibration files to use, the size of the printing dot and several other things. To configure FastRIP™ to use the proper PPD file, click the *Change* button in the *PostScript Printer* Description (PPD) file window. PPD files are on your Macintosh HD in the *System Folder>Extensions Folder>Printer Descriptions*. There will be a number of PPD files in this folder - many of which were placed there by the MAC Operating System.





Select the printer to which FastRIP™ will be sending raster data (Epson Color Stylus 4000, 4800, 7800, 9800 etc.). Press the Select button when done. The *Default Target Application window* should already be set to *FastRIP*.



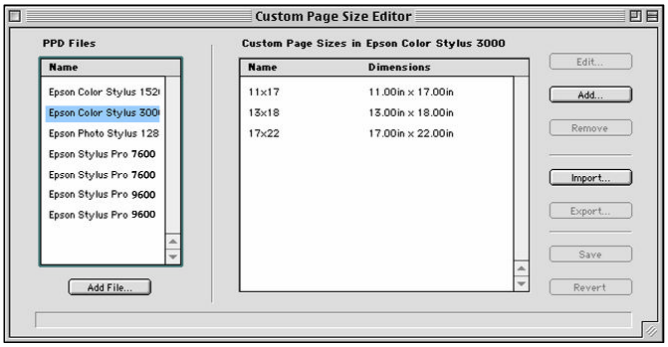
Once these settings have been entered, the desktop printer may be saved by selecting *Save* under the *File* menu. You will be asked to "*Save desktop printer as*:"… Enter the name of "FastRIP Epson" (on a MAC, this name is any name you choose and it is not case sensitive). Make sure you are saving this printer to your Desktop.

A desktop printer has now been created that will allow print jobs to be sent directly to FastRIP™ from within an application. To select this printer, go to your *Desktop* or *Apple menu>Chooser*. In the *Chooser* select *FastRIP LW 8.7* and close the *Chooser*.

Note: The *Chooser* will not show the under *Select a PostScript Printer*.

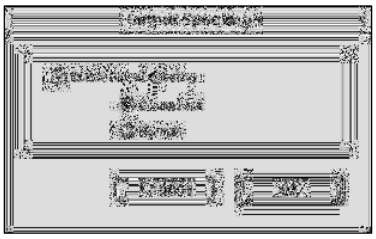
Custom Page Sizes

For non-standard film sizes you will want to create *Custom Page Sizes* so your printer will be better able to utilize them.



1. Open FastRIP™ .
2. Go to *Options>Edit Custom Page Sizes*.
3. Select and highlight your Epson printer from the left side menu box.
4. Click on *Add* on the right.
5. In the new window enter a *Name, Width and Height* for your custom page. Click *OK*.
6. Click on *Save* and close the Custom Page Size Editor.

Reprinting

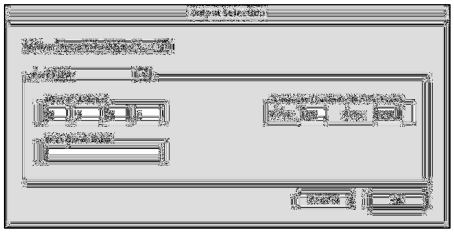


If for some reason you need to print another film again, simply select the Options pull down menu and choose *Output Spooling*. Put a check by *Enable Output Spooling* and leave it on *Concurrent*. Click *Ok*. From the *FastRIP Status Window*, select the job and click on *Reprint*.

Configuring FastRIP™ for a Network

These settings would be made on the Host computer of a network, allowing raster data to be directed to the printer. The available choices are:

LPR (Line Printer Remote)

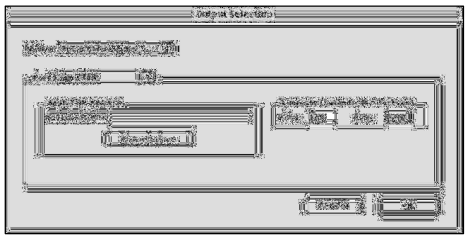


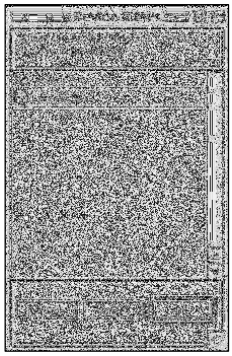
If you are connected to the printer via an Ethernet connection, we HIGHLY recommend you set up printer communications via the LPR setting, NOT the AppleTalk setting. When you set the printer to the LPR setting you will need to enter an IP address. To get your IP address for the printer you must use a utility from Epson called EpsonNet MacAssist. For more details see Appendix A.

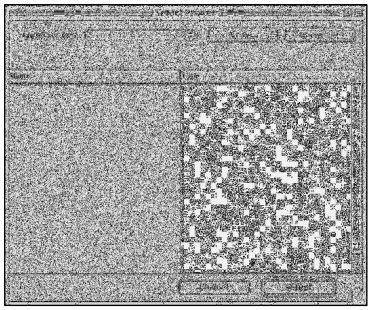
You can find this utility at:
http://support.epson.com/hardware/printer/option/c82362/index.html

AppleTalk

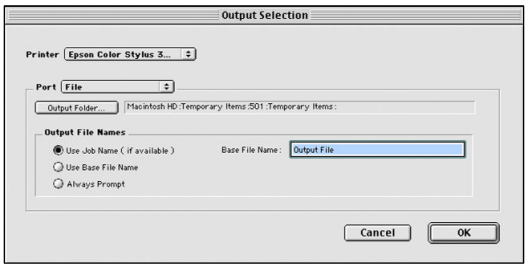
This option can be used where an AppleTalk network is in use. Click *Choose Device*. Select your printer a click *Options*. Put a check by *EPSONLQ2*. Click *Ok*. Click on the *EPSONLQ2* printer and click *Select*.







File

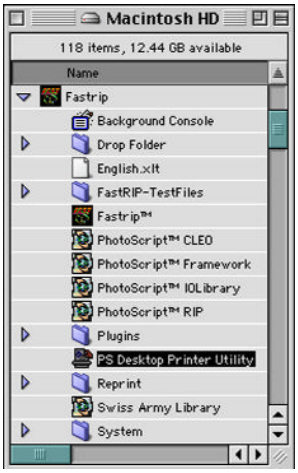


The option lets you print to a file. FastRIP™ will perform a rasterization of the file so you can print the file at a later time.

Creating a Desktop Printer

A desktop printer is a selectable icon that is used to identify the type and location of an available printer. Depending on the circumstances, either the *PS Desktop Printer Utility* (that is in the FastRIP folder on your hard disk) or the *Chooser* will be used to create a desktop printer. It is highly recommended you create a *Desktop Printer* for FastRIP™.

PS Desktop Printer Utility



The *PS Desktop Printer Utility* is a simple application that will create a new desktop printer for use with FastRIP™ . This utility will typically be used to create desktop printers for printing from remote computers across a TCP/IP network, or for printing directly the Host computer.

When the *PS Desktop Printer Utility* is first launched, a new instance of a desktop
printer is created, although this desktop printer will not become permanent until it is saved via the *File* menu. When creating a desktop printer, the *FastRIP LW* driver must be selected and the method of sending a print job to FastRIP™ must be specified.

Sending a Print Job

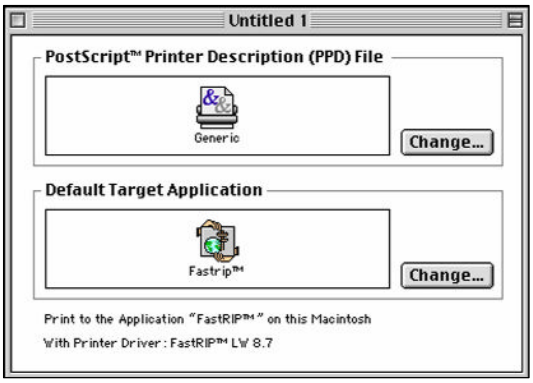
Sending a print job refers to how a print job will be transmitted from a graphics application to FastRIP™. For example, if a single computer is being used, the print job would be sent directly to FastRIP™. If a computer network is being used, then the print job would be sent using the protocol for that network, such as either AppleTalk or LPR. The Create Desktop list box is used to select the method by which the print job is sent to FastRIP™ .

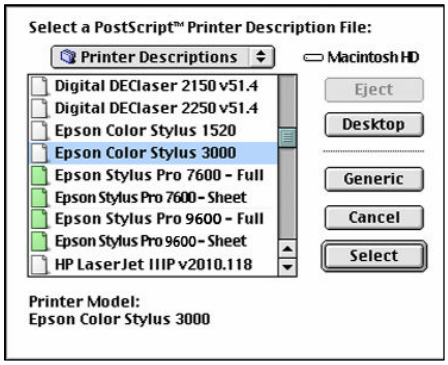
FastRIPTM (Direct) Host Computer

Select the *FastRIP (Direct)* item when using only one computer or when the Host computer will be sending print jobs to FastRIP™. A Host computer sending directly to FastRIP™ is more efficient than sending print jobs across a network.

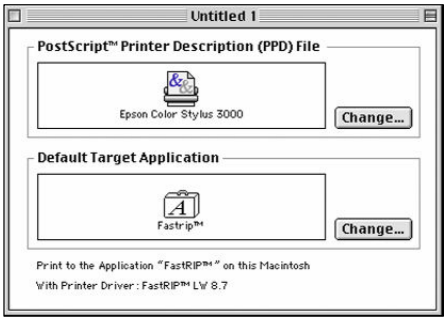
Selecting a PPD File

A second dialog will open to allow further settings to be adjusted, such as selecting the PPD (Postscript Printer Descriptions) file. Selecting the proper PPD file is CRITICAL to having FastRIP™ run properly. The PPD file tells the RIP exactly how to print, what calibration files to use, the size of the printing dot and all the other things that allow FastRIP™ to function properly. To configure FastRIP™ to use the proper PPD file, click the *Change* button in the *PostScript Printer* Description (PPD) file window. PPD files are on your Macintosh HD in the *System Folder>Extensions Folder>Printer Descriptions*. There will be a number of PPD files in this folder - many of which were placed there by the MAC Operating System.





Select the printer to which FastRIP™ will be sending raster data (Epson Color Stylus 4000, 4800, 7800, 9800 etc.). Press the Select button when done. The *Default Target Application window* should already be set to *FastRIP*.



Once these settings have been entered, the desktop printer may be saved by selecting *Save* under the *File* menu. You will be asked to "*Save desktop printer as*:"… Enter the name of "FastRIP Epson" (on a MAC, this name is any name you choose and it is not case sensitive). Make sure you are saving this printer to your Desktop.

A desktop printer has now been created that will allow print jobs to be sent directly to FastRIP™ from within an application. To select this printer, go to your *Desktop* or *Apple menu>Chooser*. In the *Chooser* select *FastRIP LW 8.7* and close the *Chooser*.

Note: The *Chooser* will not show the under *Select a PostScript Printer*.

Chapter 5
Settings and Modes

FastRIP™ has a variety of settings and modes that allow you to customize your print output.

High Speed (HS) Mode

FastRIP™ allows you to print twice as fast in the HS (High Speed) mode. There might be a slight decrease in the amount of ink laid down and there could be very minor registration issues on large prints.

Functions

FastRIP™ offers a variety of functions for output, including font use, scaling, print mode, color management and spot color options. Not all options are available with all printers. Starting on page 49 of this manual we list the various available print modes for each of the different printers.

Inkjet Proofs

FastRIP™ allows you to print a color calibrated inkjet proof to show a customer. You can print a standard inkjet proof or you can print a proof using standard halftone dot settings of 45 LPI, 55 LPI or 65 LPI to simulate the look of halftones when the image is actually screen printed. The halftone dot proof is much better to use than the regular inkjet proof because it provides the customer a truer representation of the final product.

Heat Transfers

FastRIP™ is calibrated for most off-the-shelf, coated T-Shirt transfer paper. It does color correction and mirrors the image before output so it can be used with most T-Shirt Transfer papers from Canon, Avery, EPSON, etc.

Recommended Resolution

If you are printing from a vector based program, the image resolution varies by printer. For film output, FastRIP™ uses a 720 x 720 dpi setting for “monochrome” printing. This is actually a fairly high resolution when you consider many “imagesetters” like the OYO and EcoPRO are only printing at 400 to 600 dpi.

If you are printing from a pixel based program like *Adobe Photoshop*, the image resolution needs to be high enough to prevent jagged edges in the print. For halftone

work, a resolution of 200 - 250 dpi is generally acceptable. If the image has a lot of text or hard edges, you should use a "final image size" resolution of 300 dpi.

If you are new to computer graphics, take some time to gain a good understanding of image resolutions. It will dramatically improve the quality of your work.

Halftone Frequency, Angle and Shape

The Epson 7800 (FastRIP™ XL), Epson 9800 (FastRIP™ LF), and Epson 4000 (FastRIP™ Pro) create an excellent halftone at a line count of up to 133 lines per inch (LPI) using FastRIP™ Standard Density 2880 and a *round* dot shape. As you get higher than 133 LPI, slight banding may occur. This is due to the fact that at a printer resolution of 2880 x 1440 dpi, a higher line count will produce more gray levels.

Note: The Epson 4800 can only print up to 65LPI.

FastRIP™ does a good job of creating whatever dot shape you set. While it has been a commonly held belief that an elliptical dot was better, you might find that with an inkjet printer, round is a better dot shape choice.

When printing halftone dots on or next to halftone dots, optical patterns can form called "Moiré Patterns." These patterns look like checker boards and are not desirable. To minimize Moiré Patterns, use a halftone angle of 25 degrees for all screens on photorealistic jobs. This is called "Simulated Process Color." For normal CMYK Process Color, try angles of Cyan 15, Magenta 45, Yellow 75 and Black 75 (Yes, the black and yellow are the same angles.)

We are constantly developing more print modes, so keep your eye on our website http://screenprinters.net/fastrip_family.php for updates.

Chapter 6
Printing From a Graphics Application

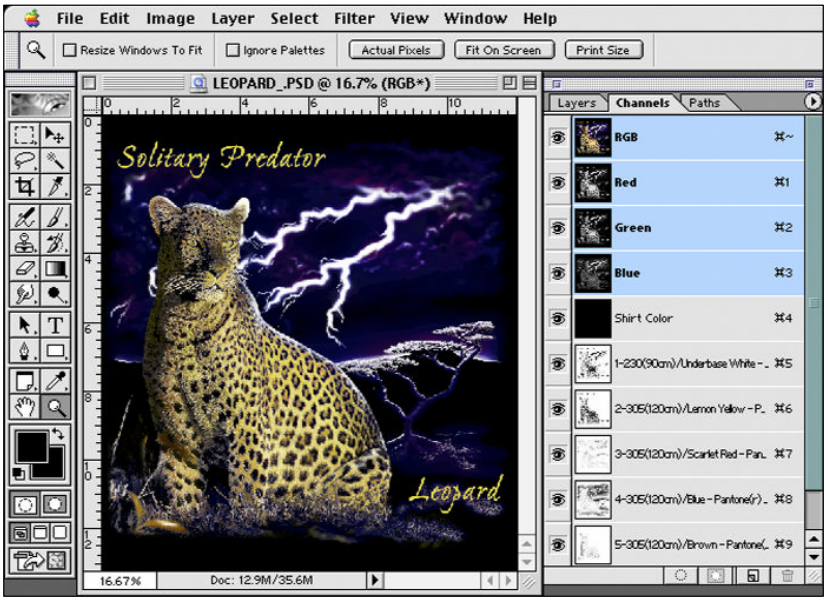
FastRIP™ allows you to print directly from *Adobe Photoshop*, *Adobe Illustrator*, *Macromedia Freehand*, *QuarkXpress and CorelDraw*. Any customizations you make in the application will be imported by FastRIP™ , including halftone dot frequency, dot shape, angle of dots, color trapping and overprinting.

Printing with Photoshop

Here are the steps necessary to output from Adobe Photoshop on a Macintosh OS:

1. Select the *FastRIP Epson Desktop Printer* from the printer icon in the upper right menu bar on the desktop or choose *FastRIP LW 8.7* in the *Chooser*.

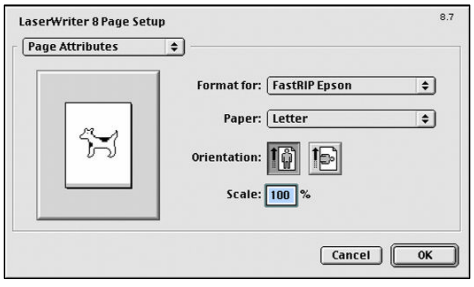
2. Open *Photoshop* and the graphic file you wish to print.



3. Create the color separations, these are called "*Channels*" in Photoshop. Place the *Preview Eye* next to any channel you want to output.

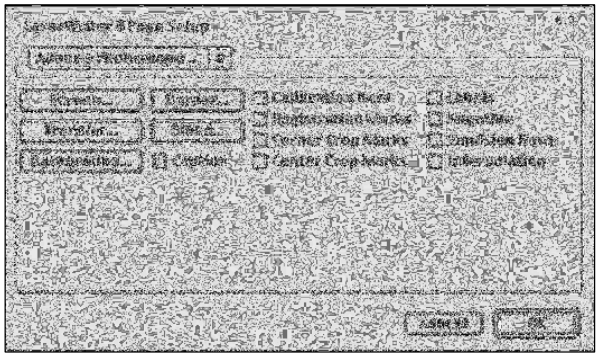
4. From the File menu choose the *Page Setup* menu item.

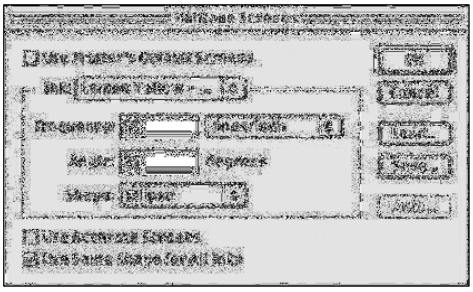
5. The *Page Setup* dialog will open. Choose the *FastRIP Epson* printer and choose the appropriate paper (film) size and orientation. While still in the *Page Setup* dialog, verify that the correct *Page Size* is selected.



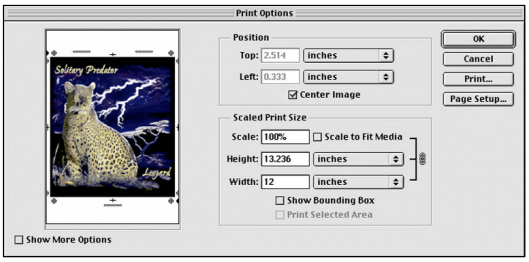
6. Go to *File>Print with Preview* and select the *Page Setup* menu.

7. Select *Screen*, uncheck *User Printer's Defaults* and enter the recommended frequency, angle and dot shape for each channel. Click *OK*.

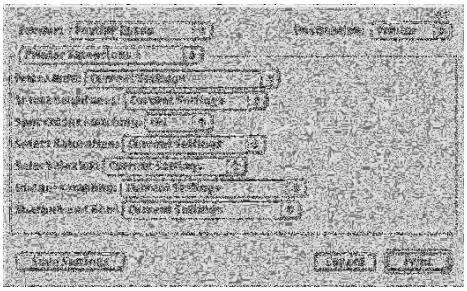




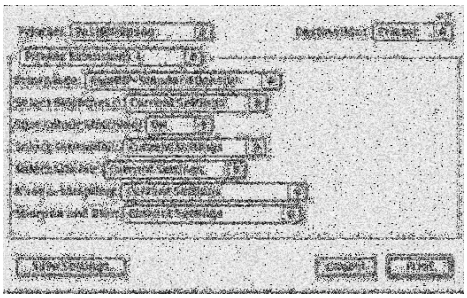
8. From the *File* menu, select *Print with preview*. This window should now display how the image will look when printed. Make any changes, if necessary.



9. Return to the *File* menu and select *Print*. Expand the *General* menu and select *Printer Extensions*.



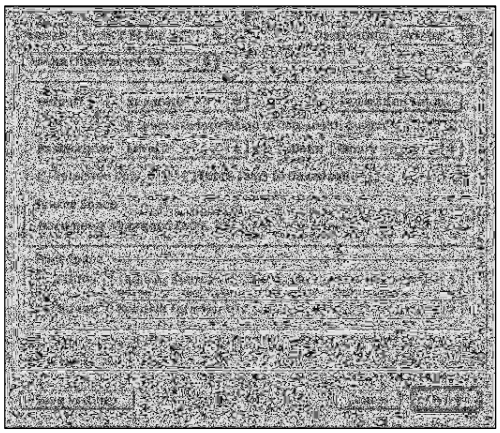
10. Expand the *Print Mode* menu and select the proper FastRIP functions. These functions are listed on page 49 of this manual. Remember, the *Current Settings* selection is the default and is the same as using the *Standard Density* function.



11. Press the *Print* button and watch FastRIP^{TM} load and rasterize the image.

Adobe Illustrator

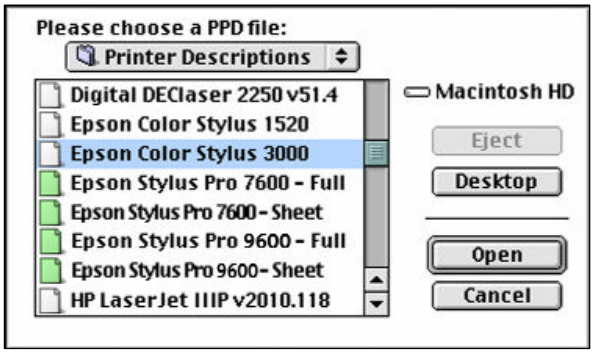
Most programs don't need to have a PPD file loaded when you print, however newer versions of *Adobe Illustrator* require that you have a PPD available. The PPD files on a MAC are located in the *Macintosh HD>Applications>FastRIP>PPD* folder. The PPD's will be called *FastRIPTM _STYL (printer#).ppd.*



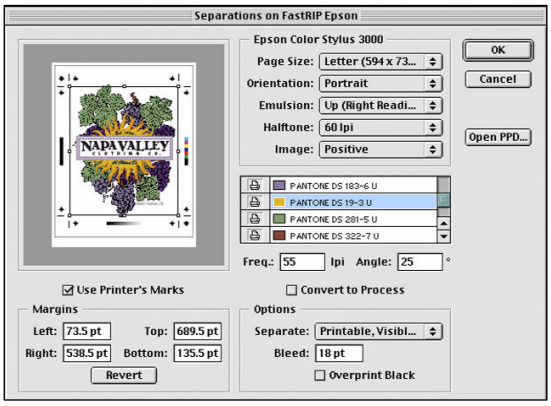
1. To print from *Illustrator*, select the *File>Print*. Expand the *General* menu and select Adobe. Click on the button labeled *Separation Setup*.

2. In the Separation Setup window click on *Open PPD*.

3. Go to *Macintosh HD>System Folder>Extensions>Printer Descriptions*. In the *Printer Descriptions* folder select the PPD file **Epson Color Stylus *** and click *Open*.



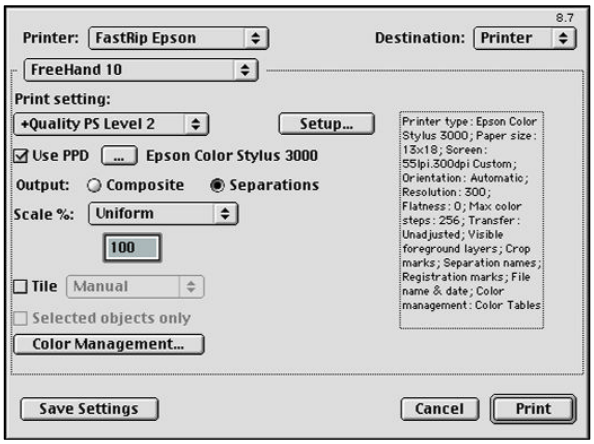
4. In the *Separation Setup* window put a **Printer Icon** next to the spot colors to print. Set the *Page Size* and *Orientation*. Set *Emulsion* to *Up* (Right Reading) and *Image* to *Positive*. Select each spot color to set the *Frequency* and *Angle*. Click *Ok*.



5. In the main print window click on *Print*.

Freehand

Most programs don't need to have a PPD file loaded when you print, however newer versions of *Macromedia Freehand* require that you have a PPD available. The PPD files on a MAC are located in the *Macintosh HD>Applications>FastRIP>PPD* folder. The PPD's will be called *FastRIPTM _STYL (printer#).ppd.*


8.7
Printer: FastRip Epson
Destination: Printer
FreeHand 10
Print setting:
+Quality PS Level 2
Setup...
Use PPD
Epson Color Stylus 3000
Output: Composite Separations
Scale %: Uniform
100
Tile Manual
Selected objects only
Color Management...
Printer type: Epson Color Stylus 3000; Paper size: 13x18; Screen: 55lpi.300dpi Custom; Orientation: Automatic; Resolution: 300; Flatness: 0; Max color steps: 256; Transfer: Unadjusted; Visible foreground layers; Crop marks; Separation names; Registration marks; File name & date; Color management: Color Tables
Save Settings
Cancel
Print

1. To print from *Freehand*, go to *File>Print*. Expand the *General* menu and select *Freehand*.

2. Under *Print Setting,* select **+Quality PS Level 2**. Put a check by *Use PPD*. Click on the box with the three dots to browse for your printer's PPD.

3. Click on *Setup*.

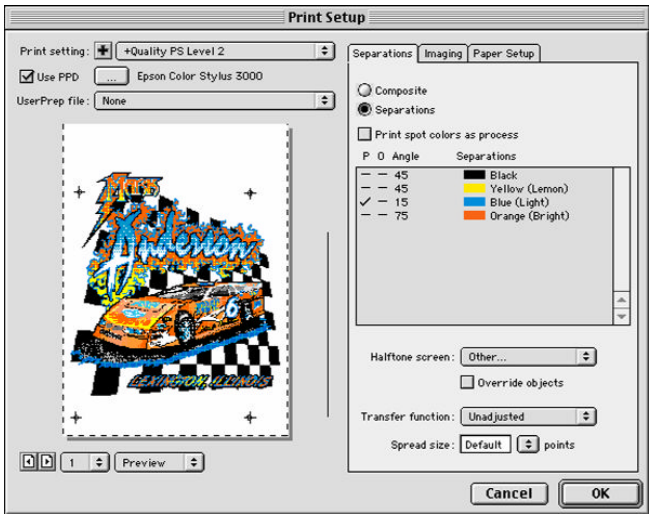
4. Choose the *Separations* tab and Select *Separations*. Click on each spot color to set the angle.

5. Expand the *Halftone* screen and select *Other*. Set the LPI and click *Ok*.

6. Choose the *Page Setup* tab and set the appropriate *Page Size*.

7. Click *Ok* to exit *Print Setup* window.

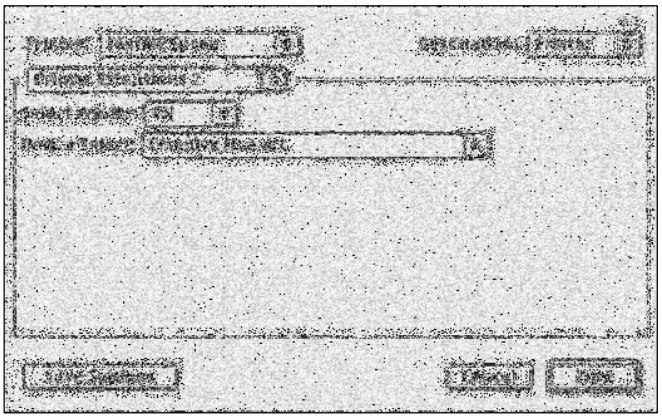
8. You are now ready to print.



How to print complex files

Files created in Vector-based programs like *Adobe Illustrator*, *Macromedia Freehand*, *CorelDraw*, or *QuarkXPress* can create complex files. FastRIP™ has an option called *Complex Line Art* that will send the data to FastRIP™ as one piece instead of in sections. Not all files will need the Complex Line Art option, but if your image has complex shapes, gradients, transparencies or heavy use of the mesh tool then you might wish to use the Complex Line Art option before printing .

How to select the Complex Line Art option:



1. Open FastRIP™ .
2. Open your file in the graphic program.
3. Setup you separations to print.
4. Go to *File/Page Setup* or *Print Setup*. Select the FastRIP printer. Click *Ok*.
5. Go to *File/Print*. Bring the *General* menu down and select *Printer Extensions* 2. Bring *Current Settings* down for *Device Select*. Choose Complex Line Art.
6. Now print the file through FastRIP™ .

Tip: If the file still will not print, select one spot color to print and allocate more memory to FastRIP™. Refer to page 32.

Chapter 7
Printing to an Inkjet Printer

Inkjet Setup and Maintenance

The Basics

The manual that came with your inkjet printer typically details how to do a basic head cleaning and nozzle check, therefore we won't cover those issues here. Just keep in mind that you need to keep your inkjet clean and away from dust. If your shop has a lot of airborne contaminates, cover the printer when not in use and do your best to filter the air when using the printer. It is also important to be aware that film often carries a static charge and will attract dust from the environment. Any dust that has settled on the film can easily be transferred to the print heads when printing

Another component of inkjet printers is a setup menu. Generally these will be physically located on the printer itself, in the form of a control panel, or integrated into the software that comes with it and accessible from your computer. Since FastRIP™ has separate drivers for *each* inkjet model, it OVERRIDES any settings of the printer for media type, print direction, dot size, amount of ink deposited and more. Therefore, you don't have to worry about adjusting any settings in the *Media Type* control panel that is on your Epson printer. In fact, this holds true for all inkjet printers. Any settings you make in their standard drivers for dot size, media, etc., will be completely ignored by FastRIP™.

Inks and Ink Use

Whenever your inkjet printer is powered ON, it will perform a nozzle check. During the course of a day, it will also do a periodic nozzle cleaning as its working. If you start to see streaks in the printout, this can mean you need to do a head alignment or head cleaning. Additionally, if the printer has not been used for a few days, you should run a cleaning cycle two or three times in the morning before use. As a result, even if the majority of your printing jobs use only one color (mostly commonly black), you will eventually need to refill or replace the other color cartridges.

When selecting ink to use for your printer, we strongly recommended you use the brand of ink designed for your printer. Most third party inks are not made to print on film media. In our testing, this ink was inferior and caused head clogging and print streaking. These inks were designed for printing on paper and do not have the same opacity as the off-the-shelf EPSON inks. You may also use FastINK™ from US Screen. FastINK™ has been specifically designed to print on film media.

Support

Epson and other manufacturers have excellent support areas accessible via the internet. Take some time to visit www.epson.com and www.inkjetmall.com. There is also a support area for FastRIP™ users at www.FastFILMS.com/fastrip/users. The FastRIP™ User Arena includes News, Frequently Asked Questions, Public Documents, Technical Articles, a Request Support Form and additional downloads for the FastRIP™ program.

Inkjet Problems and Issues

Overspray and Dot Shape

Generally speaking, an inkjet printer will print a fairly clean image. However, an inkjet uses hundreds of tiny little nozzles to spray out the ink drops and occasionally a few random drops are deposited outside the image area. If you look at a typical inkjet print with a 30X magnifier, you may see a few random dots scattered very close to the actual image area. These dots are extremely small and will not burn or expose on a screen or plate. These dots are also generally only on one side of a halftone or image edge.

Another quirk of an inkjet printer is its dot shape- it's not an exact "dot" or "ellipse." However, if you compare inkjet dots with those from a laser printer or lower resolution dry thermal system, the inkjet dots are much cleaner. If you are concerned about the lack of a perfect shape to halftone dots, you need to compare the cost investment against how critical an exact dot shape is for printing. Even in an imagesetter output, the dots are not perfect.

Many very successful companies use inkjet output to print high-end process color and simulated process color on light and dark shirts. If you didn't know better you would think the films came off an imagesetter. Even if you use FastRIP™ for Flexo or basic offset negative images (newspapers and low LPI halftone usage), the dot is clean enough.

Output Speed

There may be some concern about the speed of printing when using an inkjet printer because inkjet's typically don't have as much memory as a laser printer or dry film system. Don't be concerned. FastRIP™ uses your computer's memory when "RIP'ing" the image. If you print to a 17" x 22" piece of film, the actual printing time may take up to nine minutes. That may seem long, but FastRIP™ actually processes the image much faster than RIP's that are built into laser printers. Therefore, the actual rasterizing of the image is much faster and technically speed IS NOT an issue when printing with an inkjet.

Inkjet Film

FastRIP™ is designed to print on specially coated inkjet receptive clear film. There is a wide variety of coated films on the market and some have better coatings than others. Some even have a back coating that prevents static and keeps the film from curling.

Note: Figuring out the proper side to print on with these films is often hard to tell. If the film has a notch in one corner, the printing side is facing you if the notch is in the LOWER right corner. Another way to determine which side to print on is by moistening your finger. The sticky side is the printing side. If both sides are sticky, you may have to do a test print.

For best results, use a film with a smooth coating, such as FastPOSITIVE™. It has been specially designed to work with FastRIP™ and produces excellent black areas, clean halftone dots and is quick drying when using standard Epson inks.

Film Drying

The coating on standard films is not waterproof, so if the film gets wet, the ink will run. To help prevent damage to printed images, the FastRIP™ driver for the Epson 2200 is set to pause for 60 seconds before it prints the next page. It will also pause 60 seconds after the job is complete which may trigger an “out of paper” error. Don’t panic. After 60 seconds the printer will finish clicking and know the job is done.

After removing your film from the printer, make certain the ink is thoroughly dry before stacking. When cameras and film processors were the standard, the *only* way to dry films was to hang them. Things have not changed much, with hanging films still being the best way to dry them. It is strongly recommended you devise a simple clothesline setup with film clips, however you *can* just leave them on a table or other wide flat surface.

If you have a lot of solid areas, you may need to dry films up to 30 minutes before stacking them. To prevent them from sticking together, place a paper slip-sheet between the films. You may also use a small hair dryer to assist in speeding up dry times.

Note: Each film is a little different and you might need to experiment with drying times for your shop and conditions. High humidity levels can significantly lengthen drying times.

Water Resistant Films

If a more water resistant film is needed, or if you plan to store films for a long period of time, you can spray them with a standard “artist’s fixative” designed to fix paintings. This is the same fixative applied to vellum or laser acetate to make the image darker.

Water*proof* film is also available. It is EXCELLENT, but generally costs about three times as much as standard film. Most standard film is 4 mil polyester, whereas waterproof film is generally 5 mil and has a coating that causes the ink to dry

IMMEDIATELY. It also has a special coating that gives the final print a smooth high-gloss look, just like a photograph.

Note: You can purchase a low cost, high quality waterproof film from US Screen called FastPOS™ WP.

Film Handling

You should try to keep from touching the coated edge of the film. Also, keep the imaging areas free from dust. If you are using cut sheets, fan them before loading them in the printer.

Registration

The Epson 4000, 4800, 7800 and 9800 print in perfect registration with roll film.

Roll-Feed

When outputting in Banner Mode, the printer will advance the film a few inches after printing so you can cut it with the optional paper cutter (available from Epson.com). It then pulls the film back in when you start the next print routine to minimize film waste.

Film Loading

If using large sheets, slide the paper guide all the way to the right. Also, make sure the film goes UNDER the small paper feed holder. See your Epson manual for more details.

Using Your Inkjet for Sublimation Purposes

Many users feel that once they have invested in the Epson printer for FastRIP™ they can then also use the sublimation cartridges, and create sublimation transfers for mugs, caps, shirts, metal, etc. You DO NOT want to use the same printer for both. The sublimation cartridges are over $500 per set and when you flush the ink line to change from sublimation to regular ink, you can loose up to $75 in ink. You may also find sublimation inks create clogging issues.

We highly recommend dedicating a second EPSON Printer if you want to print sublimation transfers.

Chapter 8

Printer Specific Modes and Functions

Epson 4000

Congratulations on purchasing FastRIP™ Pro, the affordable PostScript printing solution for non-PostScript printers. PostScript is an industry-standard scripting language that describes the text and graphic elements of a print job. When FastRIP™ processes a print job, these PostScript elements are used to generate a raster image (a series of horizontal lines) that the printer is capable of rendering. The printer will then print your image one raster line at a time.

FastRIP™ performs the task of a Raster Image Processor (RIP), not only handling PostScript interpretation, but also performing high-speed memory management of the raster image and the spooling of multiple jobs to the printer. FastRIP™ utilizes Virtual Memory (VM) disk processing to do this. VM processing means PostScript file size limitations have been nearly eliminated.

FastRIP™ PRO version 9.0

- •Supports PostScript Level 3 Images
- •Supports printing images up to 17” in width and length
- •Supports Left and Right borderless bleed printing on certain page sizes

The Epson Stylus Pro 4000 is a Professional Wide Format printer. Before setting up FastRIP™ PRO, read the Epson Stylus Pro 4000 Printer Guide for print head alignment, paper loading and printer management instructions.

When setting up your printer, make sure the FastINK™ cartridge is inserted into slot #5. If the message “Wrong Ink” displays on the Epson 4000 Control Panel, look at the white sticker on the FastINK™ cartridge. The top line will start with “US....BLKD110***U***.” If there is not a “U” at the end of the product code, contact the Support Department to exchange the FastINK™ cartridge. If you find an Epson Matte black cartridge in slot # 5 of the printer, contact the Support Department to exchanged the cartridge for a FastINK™ cartridge that has a Matte Chip.

Important Note: Speed matters. Processor speed determines how fast files will be processed through FastRIP™. If your processor is slow and the image is large and/or complex, it will take a long time for the job to be completed. Since most graphic intensive images qualify as large and complex, we recommend you have a fast processor. Simply stated, “The faster the processor speed, the quicker the file will print to the printer.”

FastRIP™ Pro Print Modes - Epson 4000

FastRIP™ has a wide variety of output *Print Mode* functions, whether you want to print a full color proof on inkjet paper, a T-Shirt Heat Transfer or a dense black print on clear film for screen making.

General Film Output Print Mode

- **FastRIP 720 SD**
- **FastRIP 1440 SD**
- **FastRIP 2880 SD**
- **FastRIP 2880 SD85**
- **FastRIP 2880 SD100**
- **FastRIP 2880 SD133** - Use this mode for most output, including clear film that is smooth and waterproof inkjet film. This option may experience more banding or streaking when used on poor quality film that has a rough surface. This is the default for *Current Settings*.

- **FastRIP 720 DD**
- **FastRIP 1440 DD** - If you need a denser image, use this setting to print a heavier deposit of ink. Double Density works best on poor quality film but lays down too much on waterproof film. Use Standard Density for water-proof film.

FastRIP 720 SD, 720 DD, 1440 SD, 1440 DD and FastRIP 2880 SD will print up to 65 LPI
FastRIP 2880 SD85 will print up to 85 LPI.
FastRIP 2880 SD100 will print up to 100 LPI.
FastRIP 2880 SD133 will print up to 133 LPI.

Note: Using the Double Density mode will not have an effect on the size of halftone dots (dot gain). FastRIP™ is calibrated to maintain the correct size and shape of dots for each function.

High Speed Output Print Mode

FastRIP™ allows you to print twice as fast in the HS (High Speed) mode. There might be a slight decrease in the amount of ink laid down and there could be minor registration issues on large prints.

- **FastRIP 720 SD HS**
- **FastRIP 720 DD HS**
- **FastRIP 1440 SD HS**
- **FastRIP 1440 DD HS**
- **FastRIP 2880 SD HS**
- **FastRIP 2880 SD85 HS**
- **FastRIP 2880 SD100 HS**
- **FastRIP 2880 SD133 HS**

Note: Double Density works best on poor quality film. Double Density lays down too much ink on waterproof film so use Standard Density for waterproof film.

FastRIP 720 SD HS, 720 DD HS, 1440 SD HS, 1440 DD HS, 2880 SD HS will print up to 65 LPI or frequency.
FastRIP 2880 SD85 HS will print up to 85 LPI.
FastRIP 2880 SD100 HS will print up to 100 LPI.
FastRIP 2880 SD133 HS will print up to 133 LPI.

Proof and Heat Transfer Print Modes

- **FastRIP Heat Transfer Paper** – This mode is designed for standard T-Shirt heat transfer paper that has a coating on it. The print may appear slightly weak when printed but will get brighter when the transfer is applied to a shirt. This setting will also mirror (reverse) the image.
- **FastRIP-Proof 45 LPI** - Prints a color calibrated paper proof with a 45 LPI halftone dot frequency applied to the image to simulate how the print will look when screen printed.
- **FastRIP-Proof 55 LPI**
- **Paper Proof at 55 LPI**
- **FastRIP-Proof 65 LPI**
- **Paper Proof at 65 LPI**
- **FastRIP- Generic Proof** - Prints a color calibrated inkjet paper proof. You can also use the standard Epson driver for this.

CMYK Sublimation Mode

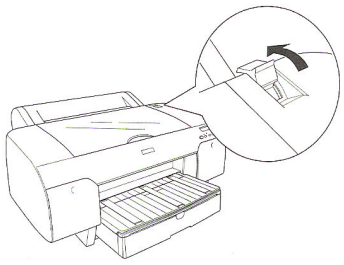
Since FastRIPTM uses the 5th photo black slot for film, you can put standard sublimation ink in the left side CMYK ink slots and print sublimation transfers.

Epson 4000 Hint and Tips

- Service Req. error 00010007-This occurs when the Green tab becomes locked on the head of the printer. Lift the top lid of the Epson 4000. Locate the head of the printer and its bright green tab. Pull this green tab out. Turn the printer OFF then back ON.

- Film curl - If the film curls up, toward the ceiling, the Epson 4000 printer will have a difficult time recognizing the film. It helps to have the film lay flat or curl down, toward the floor. FastPOSITIVE™ has the correct curl.

- To Remove Jam or Reload film - On the rear of the printer is the Roller Release Lever. Pull the lever back, away from the printer. Now you pull out the film or straighten it. Once the jam is cleared or the paper is reloaded, push the Release Lever forward.



- Reset - Sometimes it may be necessary to reset the printer. To do this, hold down the *Pause* button for 3 seconds.

- Clear horizontal lines through the image - If you have clear horizontal lines running through the image, a head cleaning will need to be performed. A general head cleaning can be done through the regular Epson driver. Resolving this issue may require up to 10 Head Cleaning cycles. If 10 head cleanings do not fix the problem, run a Power Cleaning. A Power cleaning is done from the interface of the Epson 4000 printer.

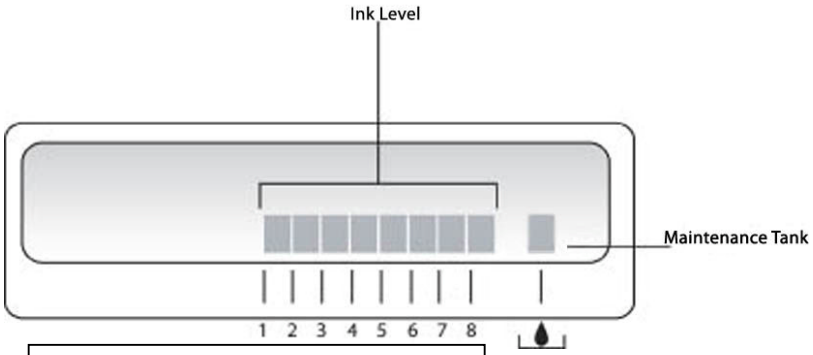
- To run a Power Cleaning, your ink cartridges need to be more than 50% full or you cannot run a Power Cleaning. The status of the printer must say *Ready*. On the printer interface, push the right arrow button or *Enter* button. Push the *Up* or *Down* arrow button until you see *Maintenance*. Push the right arrow button. Push the *Down* arrow button until *PWR Cleaning*. Push the right arrow button. Push the right arrow button again. Follow the menu messages.

- Excessive Dot Gain - If you have excessive dot gain in the halftones, run a head cleaning on the printer.

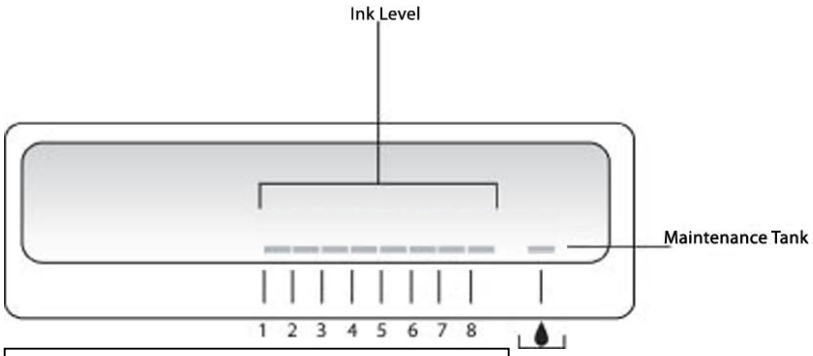
- Ink button light is solid Red - If the Ink button light is solid red, then one of the ink cartridges is empty. If any color ink cartridges read empty, you will NOT be able to print through FastRIP™. We recommend you have extra color cartridges on hand.

- UltraChrome Ink - The Epson 4000 printer comes with UltraChrome (Pigment) ink. Pigment ink does NOT adhere to non waterproof film. Pigment ink will only work with waterproof film like FastPOSITIVE™ WP film available from US Screen.

- Maintenance Tank - We recommend you have an extra Maintenance Tank on hand. If the Tank is full, you will not be able to print using the Epson 4000 printer.



Ink cartridges are full. Maintenance tank is full.



Ink cartridges are empty. Maintenance tank is empty.

- The ink to use in the Epson 4000 printer is Epson's UltraChrome Photo Black (T-5433). The ink cartridge needs to be in slot # 5.

Printing Sheets

On the printer interface ensure the status reads *Ready*. Push the *right arrow* until *Printer Setup* appears. Push the r*ight arrow*. Hit the *down arrow* until you see *PPR Size CHK*. Push the *right arrow*. Hit the d*own arrow* until you see the word OFF. Push the r*ight arrow*. You will now see an asterisk "*" next to OFF. The printer will now read what size of film is in the printer.

Halftone Frequency, Angle and Shape

FastRIP™ PRO creates an excellent halftone at a line count of up to 133 lines per inch (LPI) using FastRIP™ Standard Density 2880 and a *round* dot shape. As you get higher than 133 LPI, slight banding may occur. This is due to the fact that at a printer resolution of 2880 x 1440 dpi, a higher line count will produce more gray levels.

FastRIP™ does a good job of creating whatever dot shape you set. While it has been a commonly held belief that an elliptical dot was better, you might find that with an inkjet printer, round is a better dot shape choice.

When printing halftone dots on or next to halftone dots, optical patterns can form called "Moiré Patterns." These patterns look like checker boards and are not desirable. To minimize Moiré Patterns, use a halftone angle of 25 degrees for all screens on photorealistic jobs. This is called "Simulated Process Color." For normal CMYK Process Color, try angles of Cyan 15, Magenta 45, Yellow 75 and Black 75 (Yes, the black and yellow are the same angles.)

Outputting from Applications

Refer to page 39 of this manual. Select printer *Epson Stylus Pro 4000-PS*.

Custom Page Sizes

Refer to page 23 of this manual.

Installing FastRIPTM PRO

Refer to page 15 of this manual.

Un-Installing FastRIP™ PRO

If you need to remove FastRIP™ from your computer, put in the FastRIP CD. When the opening dialogue box appears, select *Uninstall*. Finish the Uninstall and go to *Macintosh HD>Applications.* Delete the *FastRIP* folder. Empty your trash and reboot.

Epson 4800

Congratulations on purchasing FastRIP™ Pro, the affordable PostScript printing solution for non-PostScript printers. PostScript is an industry-standard scripting language that describes the text and graphic elements of a print job. When FastRIP™ processes a print job, these PostScript elements are used to generate a raster image (a series of horizontal lines) that the printer is capable of rendering. The printer will then print your image one raster line at a time.

FastRIP™ performs the task of a Raster Image Processor (RIP), not only handling PostScript interpretation, but also performing high-speed memory management of the raster image and the spooling of multiple jobs to the printer. FastRIP™ utilizes Virtual Memory (VM) disk processing to do this. VM processing means PostScript file size limitations have been nearly eliminated.

FastRIP™ PRO version 9.0

- •Supports PostScript Level 3 Images
- •Supports printing images up to 17” in width and length
- •Supports Left and Right borderless bleed printing on certain page sizes

The Epson Stylus Pro 4800 is a Professional Wide Format printer. Before setting up FastRIP™ PRO, read the Epson Stylus Pro 4000 Printer Guide for print head alignment, paper loading and printer management instructions.

Important Note: Speed matters. Processor speed determines how fast files will be processed through FastRIP™. If your processor is slow and the image is large and/or complex, it will take a long time for the job to be completed. Since most graphic intensive images qualify as large and complex, we recommend you have a fast processor. Simply stated, “The faster the processor speed, the quicker the file will print to the printer.”

Color Images

The regular Epson driver for the Epson 4800 will NOT print color images correctly. To get film positives, US Screen has had to modify the placement of ink cartridges. The Epson 4800 requires the use of 2 ink slots for the FastINK™, slot # 5 (Light Black) and slot # 8 (Light Light Black). This causes color photographs to print dark in the gray areas, but we are currently developing Print Modes that will allow the user to print true color photographs. Please check our Web site at http://screenprinters.net/ for updates.

Black ink Cartridge

When setting up your printer, make sure the FastINK™ cartridge is inserted into slot #5 (Light Black) and slot #8 (Light Light Black). If the message “Wrong Ink” displays on the Epson 4800 Control Panel, look at the white sticker on the FastINK™ cartridge. The top

line will start with "US....BLKD110***U***." If there is not a "U" at the end of the product code, contact the Support Department to exchange the FastINK™ cartridge.

FastRIP™ Pro Print Modes - Epson 4800

FastRIP™ has a wide variety of output *Print Mode* functions, whether you want to print on inkjet paper or create a dense black print on clear film for screen making.

General Film Output Print Mode

- **FastRIP 720 SD** at **45 LPI**
- **FastRIP 720 SD** at **55 LPI**
- **FastRIP 720 SD** at **65 LPI**
- **FastRIP 1440 SD** at **45 LPI**
- **FastRIP 1440 SD** at **55 LPI**
- **FastRIP 1440 SD** at **65 LPI -** Use this mode for most output, including clear film that is smooth and waterproof inkjet film. This option may experience more banding or streaking when used on poor quality film that has a rough surface. This is the default for *Current Settings*.

High Speed Output Print Mode

FastRIP™ allows you to print twice as fast in the HS (High Speed) mode. There might be a slight decrease in the amount of ink laid down and there could be minor registration issues on large prints.

- **FastRIP 720 SD HS at 45 LPI**
- **FastRIP 720 SD HS at 55 LPI**
- **FastRIP 720 SD HS at 65 LPI**
- **FastRIP 1440 SD HS at 45 LPI**
- **FastRIP 1440 SD HS at 55 LPI**
- **FastRIP 1440 SD HS at 65 LPI**

Proof and Heat Transfer Print Modes

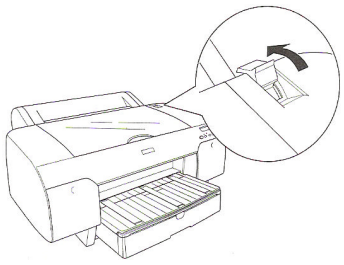
FastRIP™ for the does not support Print Modes for Heat Transfer or color Proofs on the Epson 4800. Please check our website http://screenprinters.net for updates

Epson 4800 Hint and Tips

- Service Req. error 00010007-This occurs when the Green tab becomes locked on the head of the printer. Lift the top lid of the Epson 4800 and locate the head of the printer and its bright green tab. Pull this green tab out. Turn the printer OFF then back ON.

- Film curl - If the film curls up, toward the ceiling, the Epson 4800 printer will have a difficult time recognizing the film. It helps to have the film lay flat or curl down, toward the floor. FastPOSITIVE™ has the correct curl.

- To Remove Jam or Reload film - On the rear of the printer is the Roller Release Lever. Pull the lever back, away from the printer. Now you pull out the film or straighten it. Once the jam is cleared or the paper is reloaded, push the Release Lever forward.



- Reset - Sometimes it may be necessary to reset the printer. To do this, hold down the *Pause* button for 3 seconds.

- Clear horizontal lines through the image - If you have clear horizontal lines running through the image, a head cleaning will need to be performed. A general head cleaning can be done through the regular Epson driver. Resolving this issue may require up to 10 Head Cleaning cycles. If 10 head cleanings do not fix the problem, run a Power Cleaning. A Power cleaning is done from the interface of the Epson 4800 printer.

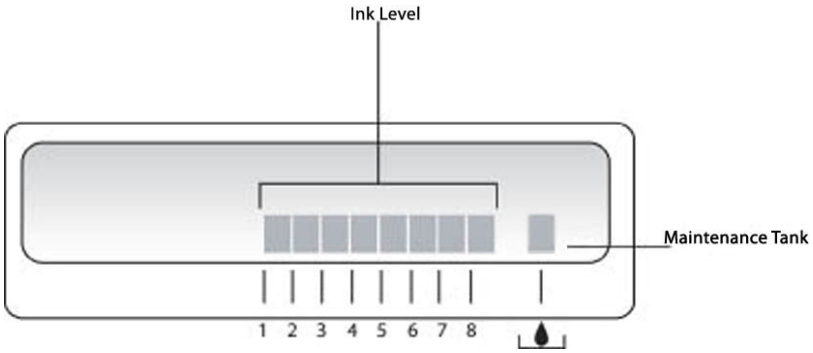
- To run a Power Cleaning, your ink cartridges need to be more than 50% full or you cannot run a Power Cleaning. The status of the printer must say *Ready*. On the printer interface, push the right arrow button or *Enter* button. Push the *Up* or *Down* arrow button until you see *Maintenance*. Push the right arrow button. Push the *Down* arrow button until *PWR Cleaning*. Push the right arrow button. Push the right arrow button again. Follow the menu messages.

- Excessive Dot Gain - If you have excessive dot gain in the halftones, run a head cleaning on the printer.

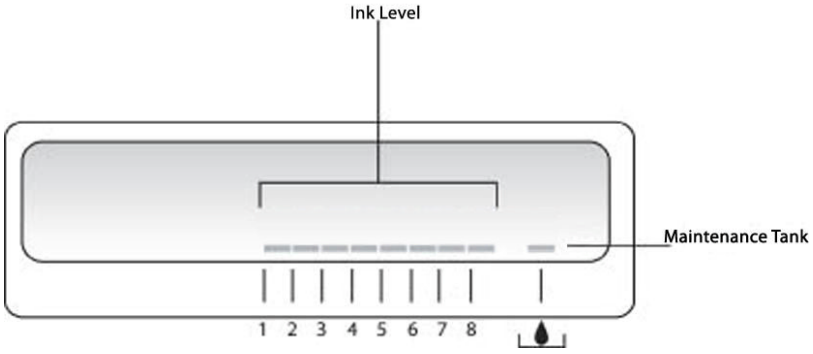
- Ink button light is solid Red - If the Ink button light is solid red, then one of the ink cartridges is empty. If any color ink cartridges read empty, you will NOT be able to print through FastRIP™. We recommend you have extra color cartridges on hand..

- UltraChrome Ink - The Epson 4800 printer comes with UltraChrome (Pigment) ink. Pigment ink does NOT adhere to non water-proof film. Pigment ink will only work with waterproof film like FastPOSITIVE™ WP film from US Screen.

- Maintenance Tank - We recommend you have an extra Maintenance Tank on hand. If the Tank is full, you will not be able to print using the Epson 4800 printer.



Ink cartridges are full. Maintenance tank is full.



Ink cartridges are empty. Maintenance tank is empty.

Printing Sheets

On the printer interface ensure the status reads *Ready*. Push the *right arrow* until *Printer Setup* appears. Push the r*ight arrow*. Hit the *down arrow* until you see *PPR Size CHK*. Push the *right arrow*. Hit the d*own arrow* until you see the word OFF. Push the r*ight arrow*. You will now see an asterisk "*" next to OFF. The printer will now read what size of film is in the printer.

Halftone Frequency, Angle and Shape

FastRIP™ PRO creates an excellent halftone at a line count of up to 65 lines per inch (LPI).

FastRIP™ does a good job of creating whatever dot shape you set. While it has been a commonly held belief that an elliptical dot was better, you might find that with an inkjet printer, round is a better dot shape choice.

When printing halftone dots on or next to halftone dots, optical patterns can form called “Moiré Patterns.” These patterns look like checker boards and are not desirable. To minimize Moiré Patterns, use a halftone angle of 25 degrees for all screens on photorealistic jobs. This is called “Simulated Process Color.” For normal CMYK Process Color, try angles of Cyan 15, Magenta 45, Yellow 75 and Black 75 (Yes, the black and yellow are the same angles.)

Outputting from Applications

Refer to page 39 of this manual. Select printer *Epson Stylus Pro 4800-PS*.

Custom Page Sizes

Refer to page 23 of this manual.

Installing FastRIP™ PRO

Refer to page 15 of this manual.

Un-Installing FastRIP™ PRO

If you need to remove FastRIP™ from your computer, put in the FastRIP CD. When the opening dialogue box appears, select *Uninstall*. Finish the Uninstall and go to *Macintosh HD>Applications.* Delete the *FastRIP* folder. Empty your trash and reboot.

Epson 4800 with FastRIP™ HD Pro HS

Congratulations on purchasing FastRIP™ Pro, the affordable PostScript printing solution for non-PostScript printers. PostScript is an industry-standard scripting language that describes the text and graphic elements of a print job. When FastRIP™ processes a print job, these PostScript elements are used to generate a raster image (a series of horizontal lines) that the printer is capable of rendering. The printer will then print your image one raster line at a time.

FastRIP™ performs the task of a Raster Image Processor (RIP), not only handling PostScript interpretation, but also performing high-speed memory management of the raster image and the spooling of multiple jobs to the printer. FastRIP™ utilizes Virtual Memory (VM) disk processing to do this. VM processing means PostScript file size limitations have been nearly eliminated.

FastRIP™ HD Pro High Speed uses four ink cartridges for printing film positives along with a new RIP technology called Variable Dot. Variable Dot allows more control over size of dot while achieving a higher LPI (lines per inch) at a lower resolution. With FastRIP™ HD Pro HS you will now be able to print an LPI from 10 LPI to 180 LPI, dramatically increasing print speed while maintaining proper ink density.

FastRIP™ HD PRO High Speed (HS) version 8.5

- •Supports PostScript Level 3 Images
- •Supports printing images up to 17" in width and length
- •Supports Left and Right borderless bleed printing on certain page sizes
- •Supports printing up to 180 LPI in resolution
- •Increases print speed while maintaining ink density

Cartridge Placement

The Epson 4800 ink cartridge slots of Light Magenta, Light Cyan, Light Black and Light Black (slot 5, 6, 7 & 8) have been replaced FastINK™. FastINK™ is a Photo Black, based ink that replaces the original Epson that was not dense enough for burning screens.

Light with dye-ink

Rosette Print Mode

Rosette Halftone is a print mode created specifically for halftone screening. The Rosette Print Mode uses a rosette halftone and simulated print mode that are all set to 25 degree angles. Printing as simulated is not recommended for color matching, its more of an idea of what the angle set does.

Additionally, you can not proof Spot Colors on a Process Color device. If a user wants a more accurate proofing, they must have the ICC profile of their final output system. You can go to the ICC tab (on a job or in print mode manager) and click the *Soft Proofing* check box. Select the final output ICC. This runs the color through the final output profile before going to the FastRIP™ HD PRO HS output profile. This ensures printing colors that will match the finished product.

Note: Color modes are full color, not halftone print modes. You can't do color halftones at high LPI on this device.

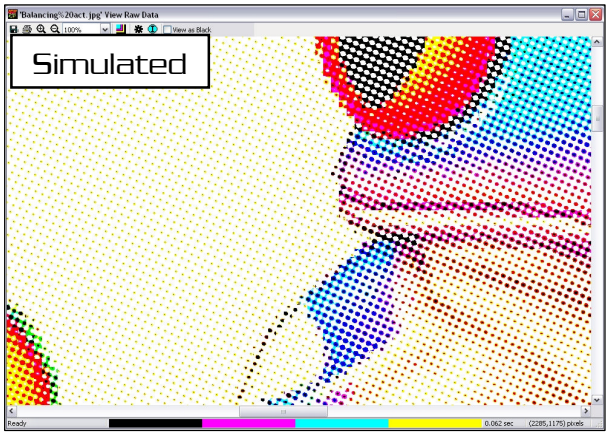
Print Modes- Epson 4800 with FastRIP™ HD Pro HS

Color

- **Plain paper 360**
- **Epson Inkjet paper 360**
- **Epson Inkjet paper 720x360**
- **Epson matte paper hw 720**
- **Epson photo paper 720**
- **Epson Premium Glossy 1440**
- **Epson matte paper hw 1440**
- **Epson photo paper 1440**
- **Ilford Smooth Pearl 1440**

Halftone color proof

- **Epson matte paper 40 LPI Rosette**
- **Epson matte paper 40 LPI Simulated**
- **Epson Matte paper 60 LPI Rosette**
- **Epson matte paper 60 LPI Simulated**
- **Epson matte paper 80 LPI Rosette**
- **Epson matte paper 80 LPI Simulated**
- **Epson matte paper 100 LPI Rosette**



FastINK Film Positives

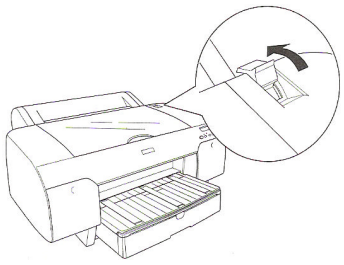
- **40 LPI** *at* **360dpi** **4xBlack FastINK**
- **60 LPI** *at* **360dpi** **4xBlack FastINK**
- **60 LPI** *at* **720x360dpi** **4xBlack FastINK**
- **80 LPI** *at* **360dpi** **4xBlack FastINK**
- **80 LPI** *at* **720dpi** **4xBlack FastINK**
- **80 LPI** *at* **720x360dpi** **4xBlack FastINK**
- **100 LPI** *at* **720dpi** **4xBlack FastINK**
- **100 LPI** *at* **720x360dpi** **4xBlack FastINK**
- **100 LPI** *at* **1440x720dpi** **4xBlack FastINK**
- **120 LPI** *at* **720dpi** **4xBlack FastINK**
- **140 LPI** *at* **1440dpi** **2xBlack FastINK**
- **140 LPI** *at* **1440x720dpi** **4xBlack FastINK**
- **140 LPI** *at* **2880x1440dpi** **FastINK**
- **160 LPI** *at* **1440dpi** **2xBlack FastINK**
- **160 LPI** *at* **2880x1440dpi** **FastINK**
- **160 LPI** *at* **2880x2880dpi** **FastINK**
- **180 LPI** *at* **2880x1440dpi** **FastINK**
- **180 LPI** *at* **2880x2880dpi** **FastINK**

Epson 4800 Hint and Tips

- Service Req. error 00010007-This occurs when the Green tab becomes locked on the head of the printer. Lift the top lid of the Epson 4000. Locate the head of the printer and its bright green tab. Pull this green tab out. Turn the printer OFF then back ON.

- Film curl - If the film curls up, toward the ceiling, the Epson 4000 printer will have a difficult time recognizing the film. It helps to have the film lay flat or curl down, toward the floor. FastPOSITIVE™ has the correct curl.

- To Remove Jam or Reload film - On the rear of the printer is the Roller Release Lever. Pull the lever back, away from the printer. Now you pull out the film or straighten it. Once the jam is cleared or the paper is reloaded, push the Release Lever forward.



- Reset - Sometimes it may be necessary to reset the printer. To do this, hold down the *Pause* button for 3 seconds.

- Clear horizontal lines through the image - If you have clear horizontal lines running through the image, a head cleaning will need to be performed. A general head cleaning can be done through the regular Epson driver. Resolving this issue may require up to 10 Head Cleaning cycles. If 10 head cleanings do not fix the problem,

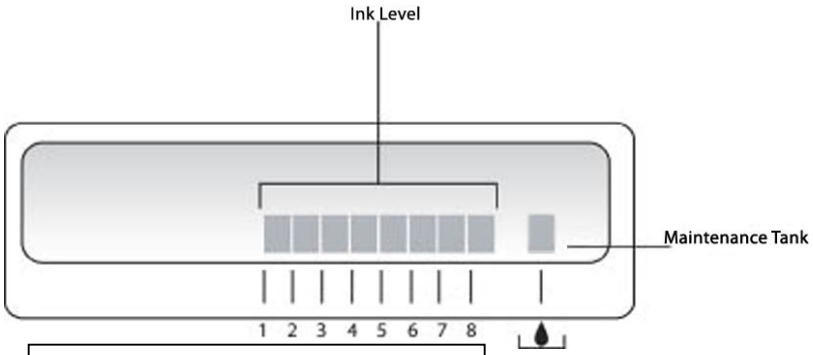
run a Power Cleaning. A Power cleaning is done from the interface of the Epson 4800 printer.

- Excessive Dot Gain - If you have excessive dot gain in the halftones, run a head cleaning on the printer.

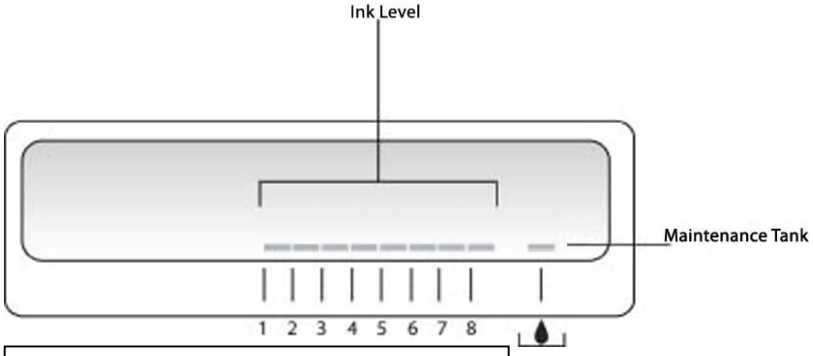
- Ink button light is solid Red - If the Ink button light is solid red, then one of the ink cartridges is empty. If any color ink cartridges read empty, you will NOT be able to print through FastRIP™. We recommend you have extra color cartridges on hand.

- UltraChrome Ink--The Epson 4800 printer comes with UltraChrome (Pigment) ink. Pigment ink does NOT work to print film positives. FastINK™ needs to be placed in the slots of Light Magenta, Light Cyan, Light Black and Light Light Black to print film positives. Pigment ink will only work with waterproof film like FastPOSITIVE™ WP film available from US Screen.

- Maintenance Tank - We recommend you have an extra Maintenance Tank on hand. If the Tank is full, you will not be able to print using the Epson 4000 printer.



Ink cartridges are full. Maintenance tank is full.



Ink cartridges are empty. Maintenance tank is empty.

Printing Sheets

On the printer interface ensure the status reads *Ready*. Push the *right arrow* until *Printer Setup* appears. Push the r*ight arrow*. Hit the *down arrow* until you see *PPR Size CHK*. Push the *right arrow*. Hit the d*own arrow* until you see the word OFF. Push the r*ight arrow*. You will now see an asterisk "*" next to OFF. The printer will now read what size of film is in the printer.

Halftone Frequency, Angle and Shape

FastRIP™ HD PRO HS creates an excellent halftone at a line count of up to 180 LPI (lines per inch).

When printing halftone dots on or next to halftone dots, optical patterns can form called "Moiré Patterns." These patterns look like checker boards and are not desirable. To minimize Moiré Patterns, use a halftone angle of 25 degrees for all screens on photorealistic jobs. This is called "Simulated Process Color." For normal CMYK Process Color, try angles of Cyan 15, Magenta 45, Yellow 75 and Black 75 (Yes, the black and yellow are the same angles.)

Custom Page Sizes

Refer to page 39 of this manual.

Outputting from Applications

Refer to page 23 of this manual. Select printer *Epson Stylus Pro 4800 Separations.*

Un-Installing FastRIP™ HD PRO HS

If you need to remove FastRIP™ from your computer, put in the FastRIP CD. When the opening dialogue box appears, select *Uninstall*. Finish the Uninstall and go to *Macintosh HD>Applications.* Delete the *FastRIP* folder. Empty your trash and reboot.

Installing FastRIP™ HD PRO HS

Refer to page 15 of this manual.

Epson 7800 – FastRIP™ XL
Epson 9800 – FastRIP™ LF

Congratulations on purchasing FastRIP™ Pro, the affordable PostScript printing solution for non-PostScript printers. PostScript is an industry-standard scripting language that describes the text and graphic elements of a print job. When FastRIP™ processes a print job, these PostScript elements are used to generate a raster image (a series of horizontal lines) that the printer is capable of rendering. The printer will then print your image one raster line at a time.

FastRIP™ performs the task of a Raster Image Processor (RIP), not only handling PostScript interpretation, but also performing high-speed memory management of the raster image and the spooling of multiple jobs to the printer. FastRIP™ utilizes Virtual Memory (VM) disk processing to do this. VM processing means PostScript file size limitations have been nearly eliminated.

FastRIP™ XL version 9.0

- •Supports PostScript Level 3 Images
- •Supports printing page sizes of 24" in width and length
- •Supports Left and Right borderless bleed printing on certain page sizes

FastRIP™ LF version 9.0

- •Supports PostScript Level 3 Images
- •Supports printing page sizes of up to 44" in width and length
- • Supports Left and Right borderless bleed printing on certain page sizes

The EPSON Stylus Pro 7800 and EPSON Stylus Pro 9800 are Professional Wide Format printers. Before setting up FastRIP™ PRO, read the applicable Printer Guide for print head alignment, paper loading and printer management instructions.

Important Note: Speed matters. Processor speed determines how fast files will be processed through FastRIP™. If your processor is slow and the image is large and/or complex, it will take a long time for the job to be completed. Since most graphic intensive images qualify as large and complex, we recommend you have a fast processor. Simply stated, "The faster the processor speed, the quicker the file will print to the printer."

Print Modes- FastRIP™ XL and FastRIP™ LF

FastRIP™ offers a variety of functions for output. These are selected under the *Advanced* menu in the *Properties* menu.

Specific print modes will need to be selected for the Epson 7800/9800 ink system. There are different print modes for use with UltraChrome inks and Photo-Dye ink. If you

select the wrong print mode you will receive a “Command Error” message in the printer interface window.

Epson 7800/9800 with Photo-Dye ink

FastRIP™ XL and FastRIP™ LF have five functions for clear film output.

- **Standard Density 720**
- **Standard Density 1440**
- **Standard Density 2880**
- **Double Density 720**
- **Double Density 1440**

Standard Density 720 and Double Density 720 will print up to 75 LPI
Standard Density 1440 and Double Density 1440 will print up to 100 LPI
Standard Density 2880 will print up to 133 LPI

For a high quality film such as FastPOSITIVE™, use the Standard Density setting. For films that have a rough coating and need a heavier deposit of inkjet ink in order to produce dense black images, use the Double Density 720 or Double Density 1440 setting.

The higher the resolution that you print at, the slower the printer will print the file. If you need to print at a certain LPI, make sure to use the appropriate resolution.

Note: Using the Double Density mode will not have an effect on the size of halftone dots (dot gain). FastRIP™ is calibrated to maintain the correct size and shape of dots for each function.

Epson 7800/9800 with UltraChrome ink

When using UltraChrome ink, FastRIP™ XL and FastRIP™ LF provide 10 output functions.

- **FastRIP Generic-Ultra**
- **FastRIP Heat Transfer-Ultra**
- **FastRIP Proof at 45 LPI-Ultra**
- **FastRIP Proof at 55 LPI-Ultra**
- **FastRIP Proof at 65 LPI-Ultra**

Standard Density

- **SD 720-Ultra**
- **SD 1440-Ultra**
- **SD 2880-Ultra**

Double Density

- **DD 1440-Ultra**
- **DD 720-Ultra**

Inkjet Proofs

Both FastRIP™ XL and FastRIP™ LF allow you to print a color calibrated inkjet proof to show a customer. You can print a standard inkjet proof or you can print a proof using standard halftone dot settings of 45 LPI, 55 LPI or 65 LPI to simulate the look of halftones when the image is actually screen printed. The halftone dot proof is much better to use than the regular inkjet proof because it provides the customer a truer representation of the final product.

Heat Transfers

FastRIP™ XL is calibrated for most off-the-shelf, coated T-Shirt transfer paper. It does color correction and mirrors the image before output so it can be used with most T-Shirt Transfer papers from Canon, Avery, EPSON, etc.

Halftone Frequency, Angle and Shape

Both FastRIP™ XL and FastRIP™ LF create an excellent halftone at a line count of up to 133 lines per inch (LPI). As you get higher than 133 LPI, slight banding may occur. This is due to the fact that at a printer resolution of 2880 x 1440 dpi, a higher line count will produce more gray levels.

FastRIP™ XL and FastRIP™ LF do a good job of creating whatever dot shape you set. While it has been a commonly held belief that an elliptical dot was better, you might find that with an inkjet printer, *round* is a better dot shape choice.

When printing halftone dots on or next to halftone dots, optical patterns can form called "Moiré Patterns." These patterns look like checker boards and are not desirable. To minimize Moiré Patterns, use a halftone angle of 25 degrees for all screens on photorealistic jobs. This is called "Simulated Process Color." For normal CMYK Process Color, try angles of Cyan 15, Magenta 45, Yellow 75 and Black 75 (Yes, the black and yellow are the same angles.)

Custom Page Sizes

Refer to page 23 of this manual.

Outputting from Applications

Refer to page 39 of this manual. When using FastRIP™ XL, select printer Epson Stylus Pro 7800-Full or Epson Stylus Pro 7800-Sheet. When using FastRIP™ LF, select printer Epson Stylus Pro 9800-Full or Epson Stylus Pro 9800-Sheet. The “Full” is for full roll and the “Sheet” is for sheet fed. Make sure you have installed both drivers

Un-installing FastRIP™ XL and FastRIP™ LF

If you need to remove FastRIP™ from your computer, put in the FastRIP CD. When the opening dialogue box appears, select *Uninstall*. Finish the Uninstall and go to *Macintosh HD>Applications.* Delete the *FastRIP* folder. Empty your trash and reboot.

Installing FastRIP™ XL and FastRIP™ LF

Refer to page 15 of this manual.

Chapter 9
Troubleshooting

Test Files

The FastRIP™ CD contains a folder with CMYK test files that will help you determine how well you can print halftone dots. Instructions for using these tests can be found in the Readme.txt file contained in this folder.

RIP Doesn't Print

If for some reason FastRIP™ doesn't print, or if you continue to get PostScript code output even after you cancel a print routine, you may need to re-install the program or the printer driver. It is possible the program or printer drivers have become corrupted.

Other Dongle or RIP Conflicts

If you are printing to other devices that use a dongle, or if you have another RIP installed for other applications, there may be conflicts. Try removing other dongles or disabling other RIP's before printing. This should resolve any conflicts.

Check Your Computer's Resources

Make sure you have enough RAM to run FastRIP™. The System Requirements listed on page 12 are a minimum. If there isn't enough memory for FastRIP™, it can sometimes just hang up and not finish ripping the job.

Start FastRIP™ BEFORE Sending a Print Job

If you get errors when FastRIP™ opens while a job is being sent from within an application, try opening FastRIP™ before you print to it. When you open the RIP it will remain idle until a *Print* command is given.

When All Else Fails....

Certain devices and computers like to see things turned on in a specific order. Generally, you should turn the printer ON before you boot your computer. TURN EVERYTHING OFF AND UNPLUG EVERYTHING FROM THE WALL OUTLET. Computers and printers still receive current when they are shut off, but unplugging them prevents any current from reaching them. As a last resort, this should clear out any "bugs" still left.

Assorted Troubleshooting Tips

Epson 7800 & 9800

Q: Film positives do not register when printing by roll film.

A: Make sure the Epson printer is level and check the tension on the film roll.

Q: Image is clipped on one side of the film.

A: Check *Page Setup* for the paper size and ensure the image fits in the printable area. If your film is not a standard size, create a *custom page size* in FastRIP™ .

General

Q: In the FastRIP Status Window it displays, "Waiting for printer."

A: Check the connection of your printer cable to make sure it is plugged in correctly. Open FastRIP™ and go to *Options>Output Select*. Check the settings for *Printer Name*, *Port* and *Device*. When in the *Device* menu, if the printer is not shown as connected, trying using a different USB port.

Q: FastRIP™ spools and interprets the information but does not print.

A: Open graphics program of your choice and select one spot color to print. Go to *File>Print* and expand the *General* menu. Select *Printer Extensions 2*. Expand the *Current Settings* menu and under *Print Mode* select *Complex Line Art*. Click on *Print*.

Q: When printing from any application to FastRIP™, the computer freezes forcing a reboot.

A: Allocate more memory to that application and the FastRIP™ program.

Q: When printing from FastRIP™, the computer dials the internet.

A: Go to *Macintosh HD>FastRIP >Plug Ins* and remove the LPD Plug In.

Q: FastRIP™ will not open or crashes.

A: Go to *Macintosh HD*/*FastRIP*/*Plug Ins* and delete the *AppleTalk Driver*, *AppleTalk Plug In*, *LPD Plug In* and *LPR Driver*.

Q: Jaguar OSX 10.2 will not allow you save or edit Custom Page Sizes.

A: Upgrade your operating system to 10.2.8.

Printing from Graphics Programs

Q: Image prints as a rough draft or prints light in Adobe Photoshop.

A: Make sure that it is to print as a Separation and NOT as Composite. Look under *Print Space>Profile*, make sure *Profile* says *Same as Source* or *Separate*. This may also say *Working Gray - Gray Generic Profile*.

Q: When printing from Photoshop the image prints fine on the left but the right prints a solid black box or vertical lines.

A: This is a memory leak within FastRIP™. Allocate 5 to 10 MB of memory to FastRIP™ program. If the problem continues then keep allocating additional units of 5 to 10MB of RAM until the file prints correct.

Q: Image prints as a composite and not as separations in Adobe Illustrator.

A: Go to *File>Print*. Expand the *General* menu and select Adobe Illustrator. Under *Output*, change it from *Composite* to *Separate*.

Q: Printing from Illustrator, Freehand or Corel Draw some of the text is missing characters.

A: Change the text to *Outline* form, but make sure you save a copy of the original file. Once you change it to 'Create Outlines', you can not change the Fonts.

Q: Unable to print full color composite or Halftone color composite.

Answer: Go to *File>Print* and expand the *General* menu. Select *Printer Extensions>Print Mode* and change the density.

Appendix A
Setting up LPD Network

Setting up LPD Networking

The advantage of LPD Networking is that a mixed TCP/IP network of Windows™ and Macintosh computers may be used with FastRIP™. The remote computer will initiate the print job, which is then sent to the Host via the Line Printer Remote (LPR) protocol. The following sections describe how LPD Networking and the LPR Protocol are configured and applied for both Host and Remote computers.

Installing LPD Networking and the LPR Protocol Under Mac OS

For a *Host Macintosh* computer, the LPD Networking checkbox must be selected during the installation of FastRIP™. This will ensure that the LPR protocols are installed on the Host.

For a remote Macintosh computer, verify that the computer has been configured for TCP/IP networking. Once TCP/IP is configured on the remote Macintosh, the LPR protocol will also be available. For more information about configuring a Macintosh computer for TCP/IP, consult the Mac OS Help facility.

Using LPR Protocol

For a remote Macintosh computer to use the LPR protocol, the PS Desktop Printer Utility must be used to create a new desktop printer. This desktop printer will identify the IP Address of the Host computer on the network, as well as the printer model to which the raster data will be sent. The following steps describe how to set up such a desktop printer:

1. Open the *PS Desktop Printer Utility*, and select the Printer *(LPR)* item.

2. When selecting the *PostScript Printer Description (PPD)* file, click the *Change* button to display a list of available printers. Select the printer to which FastRIP™ will be sending the raster output.

3. Once these settings have been entered, the desktop printer may be saved by selecting *Save* in the *File* menu. This will create a desktop printer that is selectable from graphics applications.

4. Start FastRIP™ and go to *Options>Output Selection*. Here you enter the IP address of the device (Host) and the *Host Queue Name* to configure.

You will need to know the IP address of the printer. To do this you need a utility from Epson called *EpsonNet MacAssist* that will allow you to find and specify an IP address for Epson's printers. You can obtain this utility from the Epson website **www.support.epson.com/hardware/printer/option/c82362/index.html**

The utility is self explanatory and simple to use. Once an IP address has been found/ implemented, the RIP configuration can be completed. You will see that in this utility there is no *Host Queue Name* specified. Set the Host Queue Name to **RAW**.

Tips:

1. The IP address for the printer needs to be similar to the IP address of the computer. For example the IP address for the computer is 192.68.132.25. The IP address for the printer needs to be 192.68.132.**. The first three sections before the dot must be the same as the printer. The fourth section needs to have the same amount of numbers as the computer. In this example it would be two. This can be any number but the number used for the computer or another IP address on the network.

2. Remote computers can be setup on the network. Install the FastRIP™ program on the other Mac computers and use the Remote Install. When you create your desktop printer icon using LPR, set the IP address for the remote computer not the IP address for the printer. If you select the IP address for the printer, it will by-pass the FastRIP™ program and not print correctly.

Appendix B

FastRIP™ Setup in MAC OS X 10.4.x Tiger

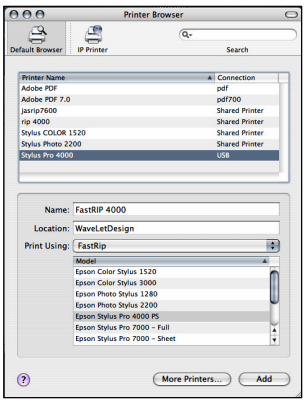
FastRIP™ Setup in Mac OS X 10.4.x Tiger

FastRIP™ Mac OS X will work 10.4.x Tiger. The printer cables that will work are USB to Parallel, USB to USB, or Ethernet cable. FireWire cables will NOT work. Below are instructions to add the Print Driver.

1. Install FastRIP™ Mac OS X.

2. Turn the Epson printer ON and connect the printer to your computer.

3. Go to *Macintosh HD>Applications>Utilities*. *Double-click* on *Printer Setup Utility*.



4. Click and highlight the Epson printer. It might be named Stylus Pro *, Stylus Photo *, or Stylus Color *.

5. Click in the *Name* box and change the name to something like FastRIP. If you have an Epson 7800 or 9800 printer you may want to add *Full* or *Sheet* at the end to know if you are printing by cut sheet or roll film.

6. Expand the *Print Using* menu and select FastRIP. Under *Model* select the PPD for your printer.

7. Click *Add*. In the *Printer List* the new FastRIP print driver should appear.

8. Insert the USB Dongle into a USB port on the computer.

9. Open FastRIP™. A blue tab or button will display the name of the newly created FastRIP print driver.